CATALOGUE OF GALAXIES AND OF CLUSTERS OF GALAXIES

VOLUME II

F. ZWICKY E. HERZOG

CATALOGUE OF GALAXIES

AND OF

CLUSTERS OF GALAXIES

prepared by

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Volume II

covering the Palomar survey fields

of the declination zones $+18^{\circ}$, $+24^{\circ}$, $+30^{\circ}$

between $6^{h}30^{m}$ and $18^{h}30^{m}$ in right ascension

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85	417	6 53	+ 18 00	197 20	+ 9 02	2
86	641	7 17	+ 18 00	199 49	+ 14 11	6
87	1507	7 41	+ 18 00	202 15	+ 19 24	10
88	236	8 05	+ 17 30	205 10	+ 24 28	14
89	1311	8 29	+ 17 30	207 37	+ 29 45	18
90	62	8 53	+ 17 30	210 08	+ 35 04	22
91	57	9 17	+ 17 30	212 47	+ 40 23	26
92	1509	9 41	+ 17 30	215 39	+ 45 43	30
93	1356	10 05	+ 17 30	218 52	+ 51 01	34
94	58	10 29	+ 17 30	222 36	+ 56 18	38
95	463	10 53	+ 17 30	227 11	+ 61 31	44
96	51	11 17	+ 17 30	233 11	+ 66 36	48
97	1406	11 41	+ 17 30	241 43	+ 71 28	52
98	89	12 04	+ 17 30	254 18	+ 75 40	58
99	1576	12 28	+ 17 30	275 50	+ 78 59	64
100	1572	12 52	+ 17 30	307 09	+ 80 05	70
101	80	13 16	+ 17 30	336 34	+ 78 18	74
102	1019	13 40	+ 17 30	355 34	+ 74 38	78
103	81	14 04	+ 17 30	7 08	+ 70 05	82
104	1417	14 28	+ 17 30	14 45	+ 65 08	88
105	54	14 52	+ 17 30	20 16	+ 60 00	92
106	91	15 16	+ 17 30	24 34	+ 54 46	98
107	82	15 40	+ 17 30	28 07	+ 49 29	102
108	83	16 04	+ 17 30	31 13	+ 44 10	106
109	55	16 28	+ 18 00	34 36	+ 39 01	112
110	122	16 52	+ 18 00	37 10	+ 33 42	116
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114	808	18 28	+ 18 00	46 54	+ 12 41	128

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		h m	o '	o '	o '	
115	23	6 36	+ 24 00	190 07	+ 8 07	130
116	1590	7 02	+ 24 00	192 42	+ 13 29	132
117	1310	7 28	+ 24 00	195 09	+ 18 56	136
118	226	7 54	+ 23 30	198 00	+ 24 17	140
119	1364	8 20	+ 23 30	200 17	+ 29 53	144
120	1355	8 46	+ 23 30	202 32	+ 35 33	148
121	237	9 12	+ 23 30	204 47	+ 41 14	152
122	25	9 38	+ 23 30	207 05	+ 46 58	156
123	1352	10 03	+ 23 30	209 26	+ 52 30	160
124	1380	10 29	+ 23 30	212 06	+ 58 16	164
125	1366	10 55	+ 23 30	215 12	+ 64 02	168
126	1353	11 21	+ 23 30	219 12	+ 69 47	172
127	103	11 47	+ 23 30	225 08	+ 75 29	178
128	135	12 13	+ 23 30	236 39	+ 80 59	184
129	1435	12 39	+ 23 30	272 23	+ 85 30	188
130	1581	13 05	+ 23 30	346 41	+ 84 41	192
131	125	13 30	+ 23 30	12 25	+ 79 58	196
132	68	13 56	+ 23 30	22 16	+ 74 24	200
133	61	14 22	+ 23 30	27 40	+ 68 41	204
134	102	14 48	+ 23 30	31 26	+ 62 55	210
135	87	15 14	+ 23 30	34 27	+ 57 09	214
136	1119	15 40	+ 23 30	37 03	+ 51 23	218
137	113	16 06	+ 23 30	39 27	+ 45 38	222
138	1438	16 32	+ 24 00	42 22	+ 40 04	226
139	1377	16 58	+ 24 00	44 34	+ 34 23	230
140	263	17 24	+ 24 00	46 46	+ 28 46	234
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142	1089	18 16	+ 24 00	51 24	+ 17 40	242
143	284	18 42	+ 24 00	53 53	+ 12 14	246

FIELDS OF SURVEY ZONE +30°

FIELD No.	Survey Plate No.	Center of Field 1950.0 α	Center of Field 1950.0 δ	I. A. U. Galactic Coordinates λ	I. A. U. Galactic Coordinates β	Page No.
		h m	o '	o '	o '	
144	411	6 10	+30 00	182 04	+ 5 44	248
145	920	6 36	+30 00	184 39	+10 45	250
146	1337	7 02	+30 00	187 01	+15 53	252
147	678	7 28	+30 00	189 12	+21 07	256
148	1344	7 54	+29 30	191 44	+26 17	260
149	1351	8 20	+29 30	193 37	+31 42	264
150	924	8 46	+29 30	195 22	+37 10	268
151	1365	9 12	+29 30	196 57	+42 42	272
152	466	9 38	+29 30	198 24	+48 16	276
153	1396	10 03	+29 30	199 37	+53 39	280
154	1387	10 29	+29 30	200 40	+59 16	284
155	1357	10 55	+29 30	201 25	+64 55	288
156	99	11 21	+29 30	201 35	+70 34	292
157	1379	11 47	+29 30	200 35	+76 13	296
158	1398	12 13	+29 30	196 01	+81 49	300
159	64	12 39	+29 30	168 43	+86 58	306
160	1393	13 05	+29 30	64 47	+85 54	312
161	131	13 30	+29 30	48 32	+80 45	322
162	86	13 56	+29 30	45 04	+75 08	328
163	70	14 22	+29 30	44 23	+69 29	332
164	1390	14 48	+29 30	44 42	+63 50	336
165	1092	15 14	+29 30	45 30	+58 11	340
166	121	15 40	+29 30	46 37	+52 34	344
167	134	16 06	+29 30	47 55	+46 58	348
168	1097	16 32	+30 00	50 03	+41 31	352
169	129	16 58	+30 00	51 38	+36 01	356
170	152	17 24	+30 00	53 21	+30 35	360
171	532	17 50	+30 00	55 14	+25 12	362
172	282	18 16	+30 00	57 17	+19 54	366
173	267	18 42	+30 00	59 30	+14 41	368

INTRODUCTION

INTRODUCTION

In this second volume of the catalogue the material is presented in essentially the same arrangement as in Volume I. This arrangement has been described thoroughly in the introduction to the first volume and it is referred to this description for all the details. Some additional remarks, however, seem appropriate in this place.

Charts

Due to the convergence of the meridians toward the pole, the coordinate lines, in these higher declinations, do not follow the pattern of the square grid as closely as they did in Volume I. For this reason the meridians as well as the declination circles have been indicated on the maps by short dashes along the edge of the square, the intervals being 4^m in Right Ascension and 1° in Declination respectively. Within the limits of accuracy set for this catalogue, the meridians on these charts are straight lines. The declination circles, on the other hand, represent themselves as parabolas with the E-W lines of the square grid as tangents and the central meridian of the field as the axis of symmetry.

Overlaps

The centers of the Sky Survey fields of the $+24^\circ$ Zone are so far apart that the $6^\circ \times 6^\circ$ squares do not overlap sufficiently to cover the whole strip in its entirety. Small triangular areas, approximately $\frac{1}{2}^m$ at the base and 3° in height, are left uncovered near the lower half of the E or W edge of the squares. The clusters of galaxies are not affected by this fact, since they have been drawn to well beyond the limits of the squares anyhow. In those rare cases, however, where galaxies were found in one of the uncovered areas, the objects were assigned to either one of the neighbouring fields and plotted in their proper places on the map, somewhat outside of the corresponding squares.

Measurement of Coordinates

The method described in Volume I for the determination of coordinates has been modified to a great extent. It was found that the measurement of rectangular coordinates and their subsequent transformation into spherical coordinates was too cumbersome a process to be attractive in higher declinations. The transformation formulae were used instead to compute and construct a set of transparent coordinate grids for the 48-inch Schmidt plates of the Sky Survey. Thereupon, Ozalid copies of these grids were prepared for all fields, and on these a set of GC Stars, as well as all NGC/IC* objects were plotted as accurately as possible. Thus, after a considerable amount of preliminary work, it became possible to determine coordinates and identify NGC/IC* objects almost instantaneously from the original Survey plates.

Acknowledgments

The construction of this second volume has been supported to a great extent by a continued grant from the National Science Foundation. We are also grateful to the California Institute of Technology and its Graphic Arts Facilities for their cooperation and support in the production of this volume.

SYMBOLS USED ON THE CHARTS

GALAXIES

✖	$m_p \leq 11.0$	●	$13.1 \leq m_p \leq 14.0$
■	$11.1 \leq m_p \leq 12.0$	○	$14.1 \leq m_p \leq 15.0$
□	$12.1 \leq m_p \leq 13.0$	△	$15.1 \leq m_p \leq 15.7$

CLUSTERS OF GALAXIES

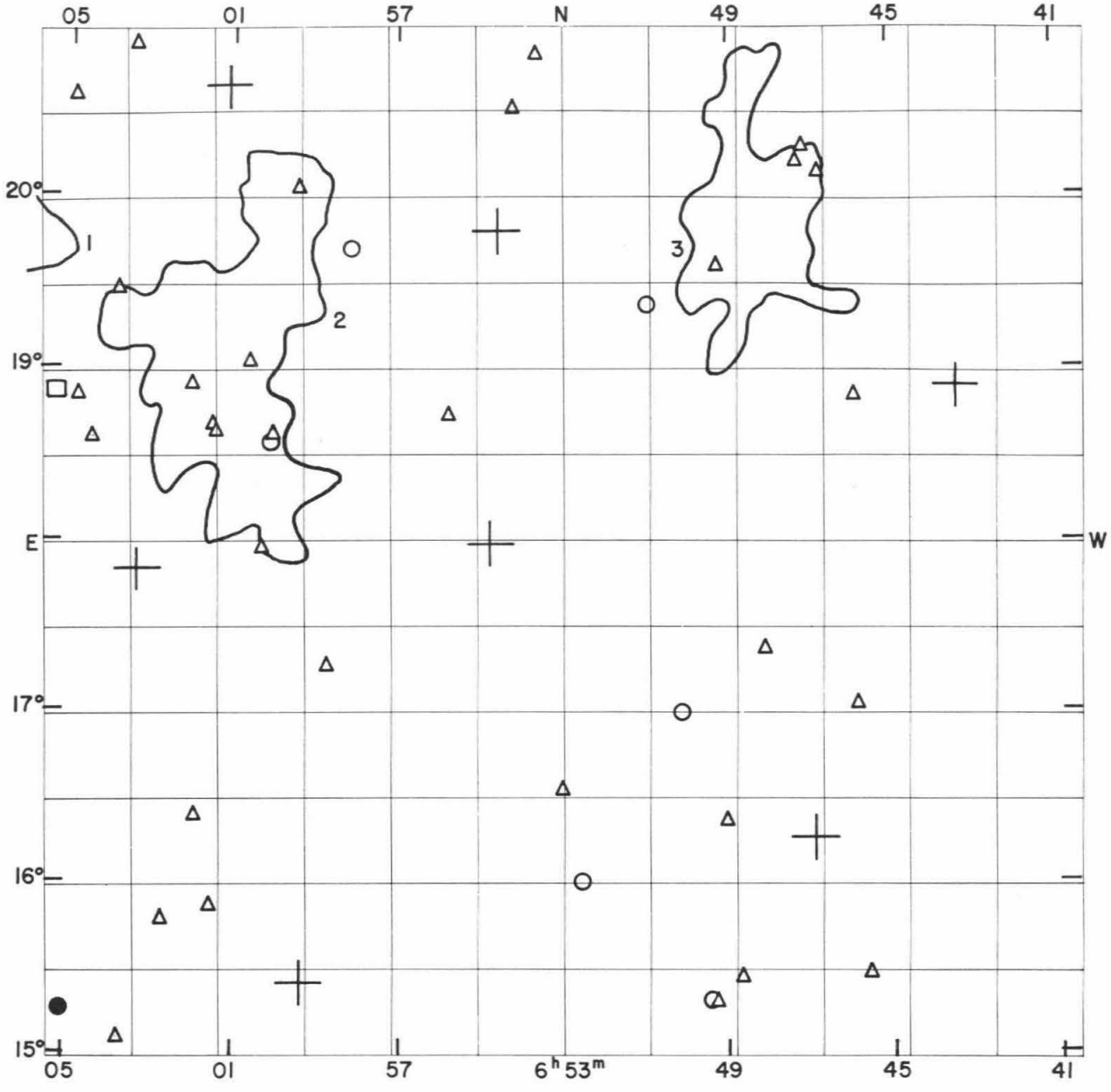
= Cluster No. 5 on the chart

GC STARS are marked by a cross: +

DISTANCES OF CLUSTERS

Near:		$V_s \leq 15,000$ km/sec
MD	= Medium distant:	$15,000$ km/sec $< V_s \leq 30,000$ km/sec
D	= Distant:	$30,000$ km/sec $< V_s \leq 45,000$ km/sec
VD	= Very distant:	$45,000$ km/sec $< V_s \leq 60,000$ km/sec
ED	= Extremely distant:	$60,000$ km/sec $< V_s$

CATALOGUE



FIELD No. 85

6^h53^m $+18^\circ00'$

Survey Plate No. 417

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
8844	6 43 25.0	+ 18 53 31	6.83
8927	6 46 57.2	+ 16 15 41	5.69
9127	6 54 36.2	+ 19 47 52	7.30
9133	6 54 48.2	+ 17 58 10	7.13
9265	6 59 26.0	+ 15 24 34	5.89
9313	7 01 08.7	+ 20 38 43	var.
9369	7 03 23.1	+ 17 49 19	7.12

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0648.4 + 1950	open	91	5.7	MD	3
0701.0 + 1858	medium compact	129	8.0	Near	2
0708.7 + 1936	medium compact	210	7.5	MD	1

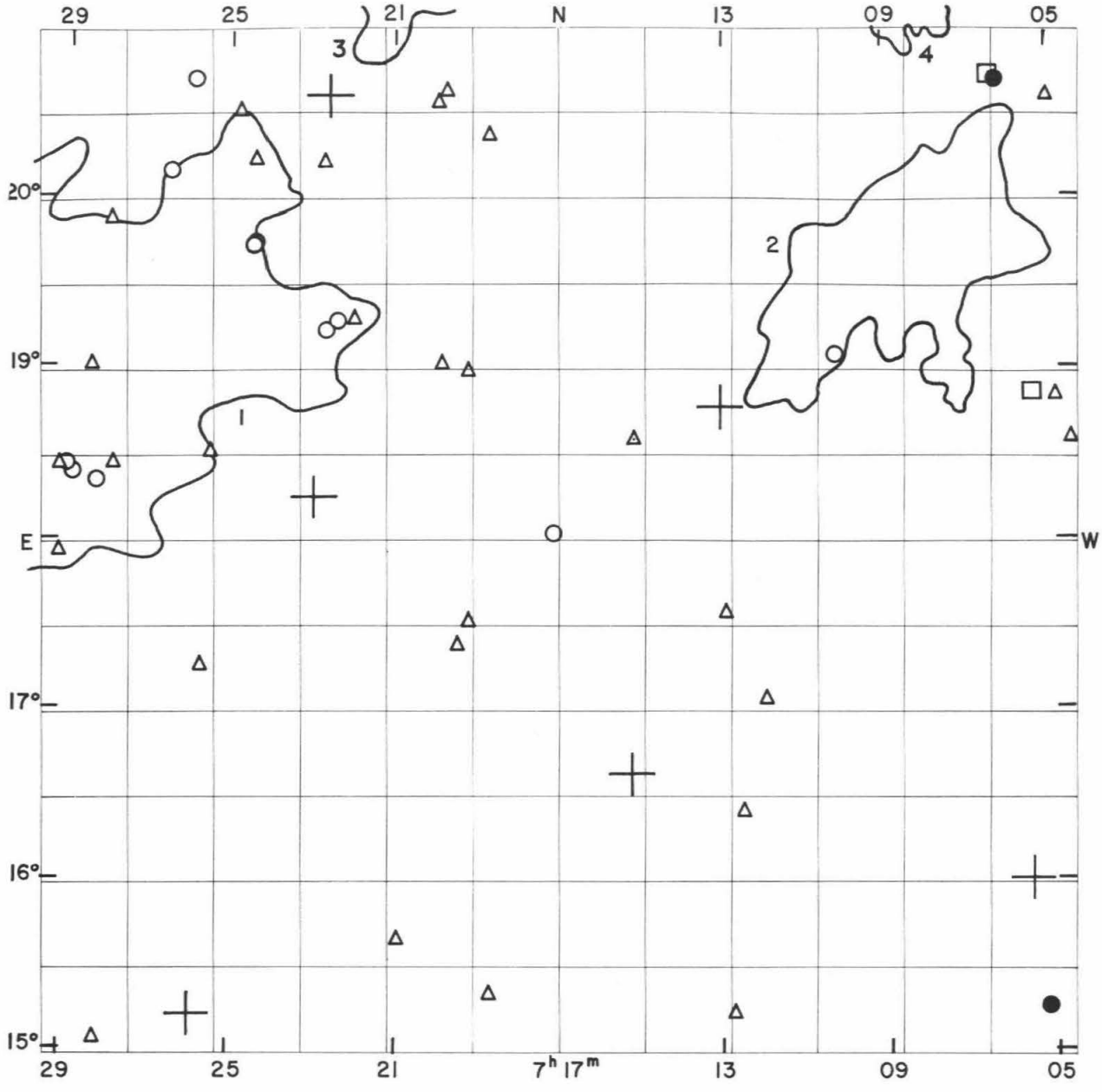
Average number of galaxies per cluster = 143.3

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
6 45.6 +15 28		15.7		
6 45.9 +17 02		15.3		
6 45.9 +18 50		15.4		
6 46.8 +20 08		15.6		diffuse
6 47.2 +20 17		15.7		
6 47.3 +20 12		15.4		
6 48.2 +17 21		15.7		
6 48.8 +15 26		15.5		
6 49.1 +16 21		15.3		
6 49.3 +19 35		15.6		
6 49.4 +15 18		15.2		
6 49.5 +15 19		14.1		
6 50.2 +16 59		14.3		resolved dwarf system
6 50.9 +19 22		14.3		
6 52.6 +16 00		14.8		
6 53.0 +16 32		15.2		
6 53.7 +20 49		15.6		double system
6 54.2 +20 30		15.1		
6 55.8 +18 43		15.5		
6 58.2 +19 42		14.9		
6 58.8 +17 15		15.4		
6 59.5 +20 02		15.4		
7 00.0 +18 36		15.4		compact
7 00.1 +18 33		15.0		
7 00.3 +17 57		15.3		
7 00.6 +19 01		15.1		
7 01.4 +18 37		15.6		
7 01.5 +15 51		15.7		
7 01.5 +18 40		15.2		
7 01.9 +16 23		15.2		
7 02.0 +18 54		15.7		
7 02.7 +15 47		15.7		
7 03.4 +20 52		15.3		double system
7 03.7 +15 05		15.7		
7 03.8 +19 27		15.4		
7 04.5 +18 35		15.4		
7 04.8 +18 50		15.3		
7 05.0 +20 35		15.7		
7 05.1 +15 15		13.4		
7 05.4 +18 51	2339	12.3	+ 2361	m_H = 12.7 Sc

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2339	-	-	12.53	Sb	12.5	Sb	-	-



FIELD No. 86

7^h17^m $+18^\circ00'$

Survey Plate No. 641

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
9421	7 05 30.0	+ 16 00 44	5.58
9632	7 13 03.3	+ 18 46 57	8.8
9701	7 15 13.2	+ 16 37 56	3.65
9898	7 22 38.2	+ 20 35 43	6.89
9911	7 22 59.9	+ 18 14 51	6.94
9988	7 25 56.8	+ 15 12 48	6.07

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0708.0 + 2107	medium compact	82	2.2	D	4
0708.7 + 1936	medium compact	210	7.5	MD	2
0720.6 + 2259	open	217	14.2	Near	3
0730.1 + 1858	medium compact	452	15.6	Near	1

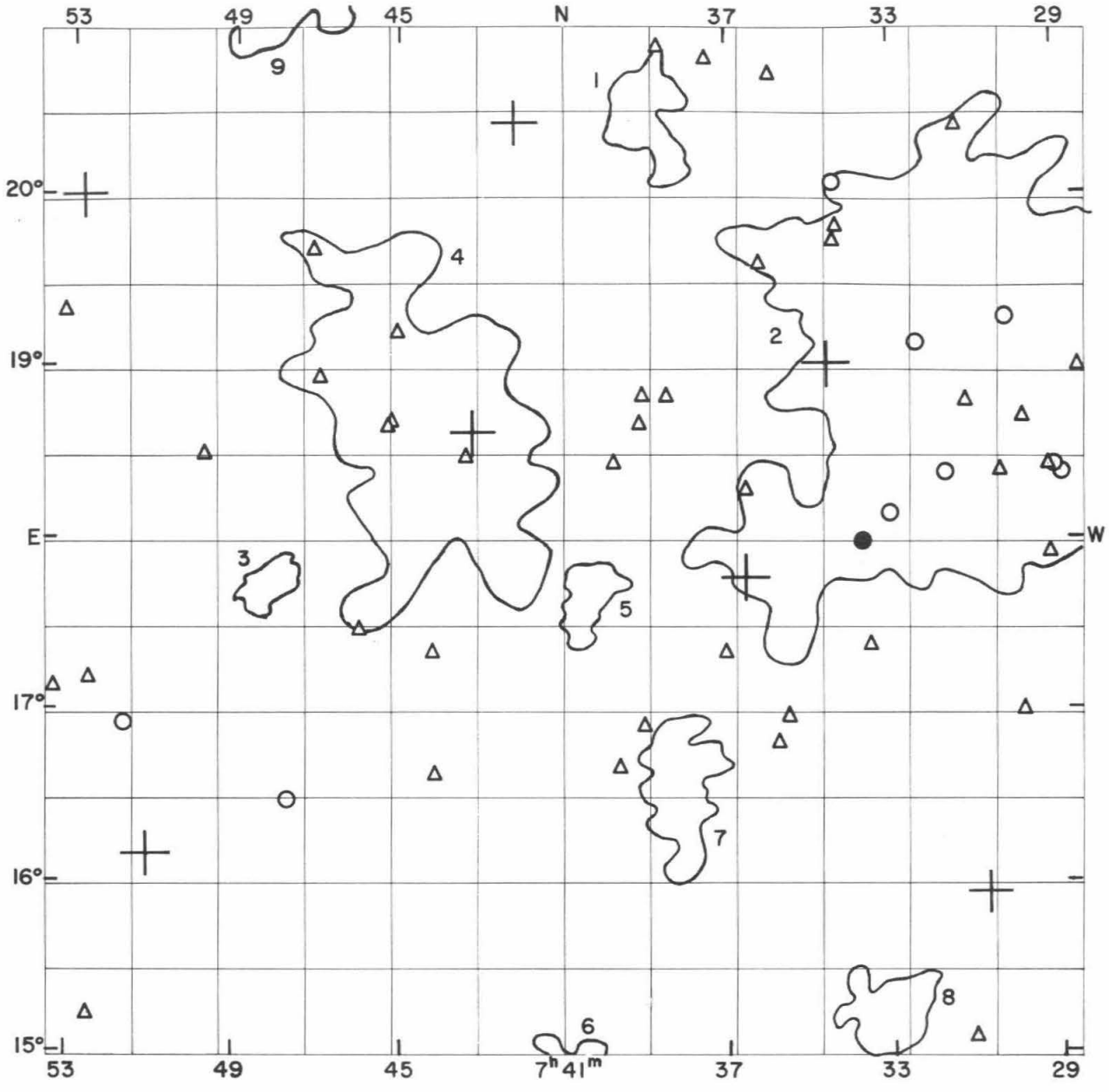
Average number of galaxies per cluster = 240.3

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 04.5	+18 35		15.4		
7 04.8	+18 50		15.3		
7 05.0	+20 35		15.7		
7 05.1	+15 15		13.4		
7 05.4	+18 51	2339	12.3	+ 2361	m_H= 12.7 Sc
7 06.3	+20 40	2341	13.7		
7 06.4	+20 43	2342	12.6		
7 10.3	+19 05	2181*	14.8		
7 12.0	+17 03		15.5		
7 12.5	+16 24		15.5		
7 12.7	+15 13		15.2		
7 12.9	+17 33		15.6		
7 15.1	+18 35		15.7		double system
7 17.1	+18 02		14.9		
7 18.7	+15 19		15.7		compact
7 18.8	+20 20		15.4		
7 19.2	+17 30		15.2		
7 19.3	+18 58		15.6		
7 19.5	+17 22		15.1		
7 19.8	+20 36		15.6		
7 19.9	+19 00		15.1		
7 20.0	+20 32		15.5		
7 20.9	+15 38		15.7		double nebula
7 22.0	+19 17		15.7		
7 22.4	+19 16		14.4		
7 22.7	+19 13		14.9		
7 22.8	+20 11		15.5		
7 24.4	+19 44		14.7		
7 24.5	+19 43		14.9		
7 24.5	+20 12		15.3		
7 24.9	+20 29		15.6		
7 25.5	+18 29		15.2		
7 25.7	+17 14		15.5		
7 25.9	+20 40		14.6		
7 26.6	+20 08	2392	14.9		
7 27.9	+18 25		15.3		
7 28.0	+19 51		15.7		
7 28.2	+15 02		15.5		
7 28.3	+18 20		15.0		
7 28.5	+19 00		15.7		
7 28.9	+18 24	2406	15.0		
7 29.0	+18 27	2407	14.9		
7 29.2	+17 55		15.7		diffuse spiral
7 29.2	+18 26		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2339	-	-	12.53	Sb	12.5	Sb	-	-



FIELD NO. 87

7^h41^m $+18^\circ00'$

Survey Plate No. 1507

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	° ′ ″	
10106	7 30 45.3	+ 15 56 09	5.07
10211	7 34 35.8	+ 19 01 57	6.80
10276	7 36 35.4	+ 17 47 24	5.24
10437	7 42 13.3	+ 20 26 16	6.28
10456	7 43 13.9	+ 18 38 01	5.02
10669	7 51 07.0	+ 16 10 03	7.08
10707	7 52 44.9	+ 20 01 03	5.36

CLUSTERS OF GALAXIES

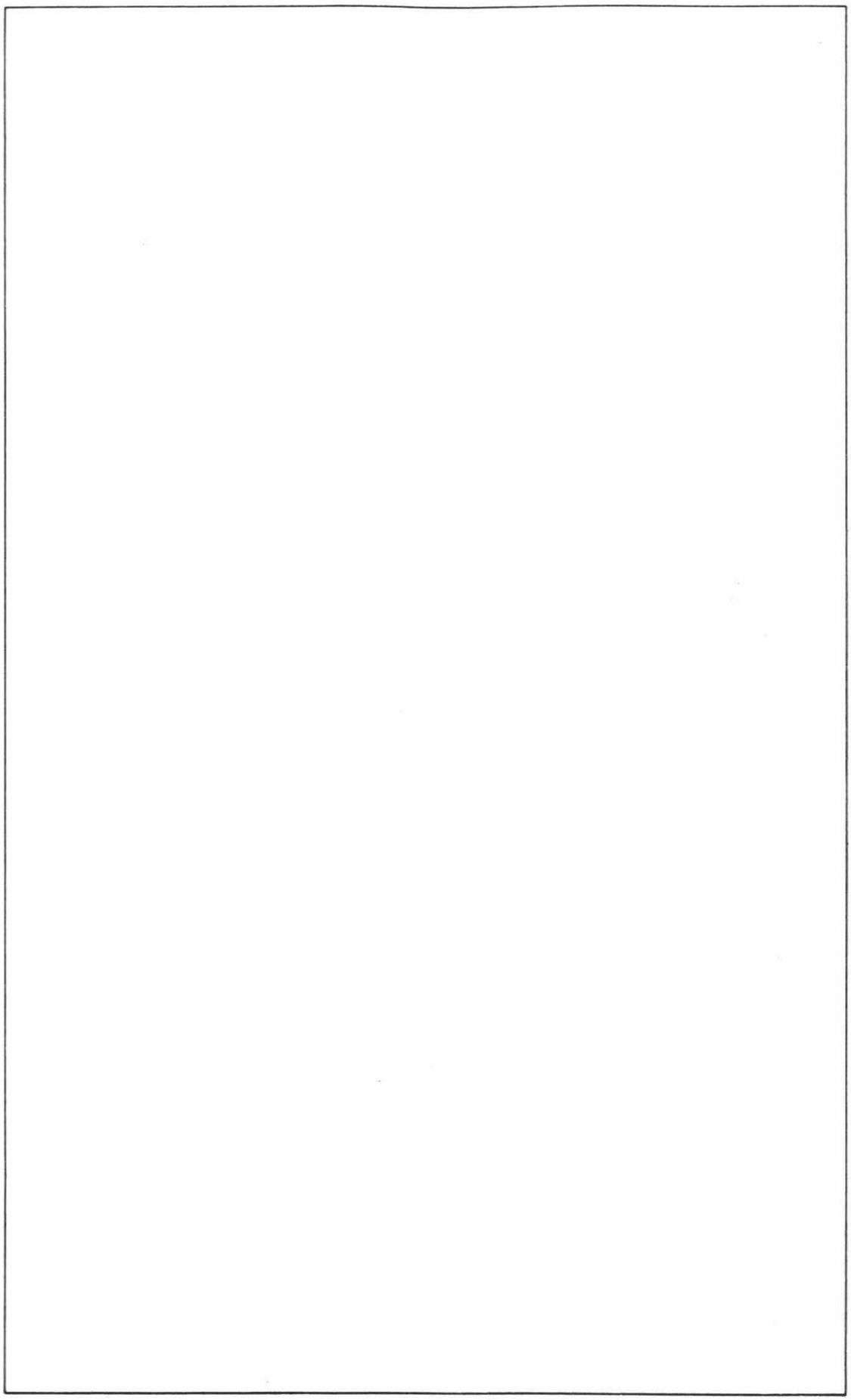
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0730.1 + 1858	medium compact	452	15.6	Near	2
0377.1 + 1514	compact	90	2.6	D	8
0738.1 + 1634	medium compact	94	3.0	D	7
0739.0 + 2028	open	76	2.8	D	1
0740.4 + 1740	compact	93	2.1	VD	5
0740.7 + 1455	medium compact	67	2.1	D	6
0744.3 + 1839	medium compact	203	9.0	Near	4
0747.5 + 2120	medium compact	171	3.9	D	9
0748.2 + 1744	compact	132	1.7	VD	3

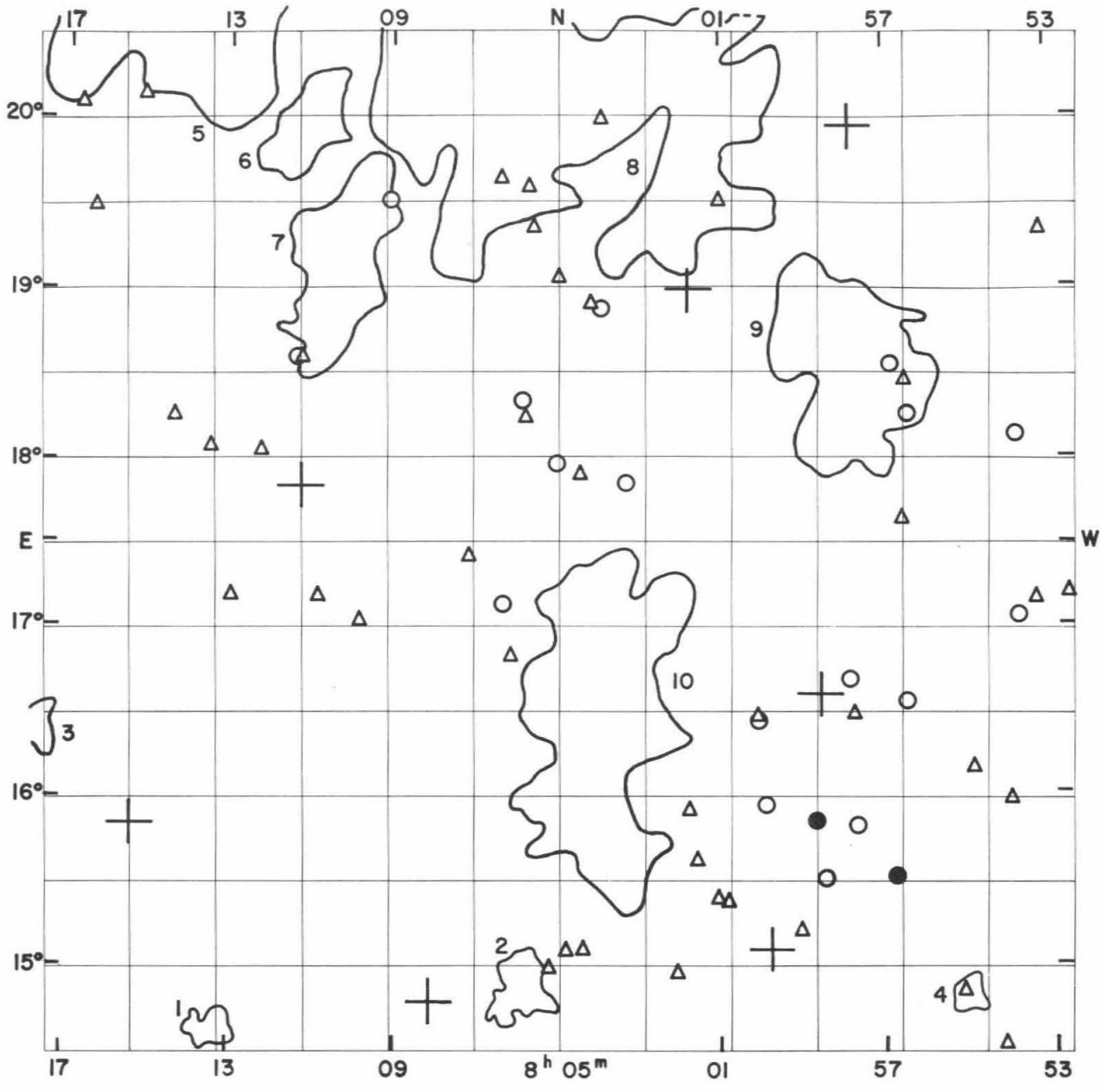
Average number of galaxies per cluster = 153.1

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
7 28.5	+19 00		15.7		
7 28.9	+18 24	2406	15.0		
7 29.0	+18 27	2407	14.9		
7 29.2	+17 55		15.7		diffuse spiral
7 29.2	+18 26		15.4		
7 29.8	+17 00		15.4		compact
7 29.8	+18 42		15.5		very compact
7 30.3	+19 18		14.7		
7 30.4	+18 24		15.6		
7 31.1	+15 05		15.3		
7 31.2	+18 48		15.5		triple system
7 31.4	+20 25		15.6		
7 31.7	+18 23	2411	14.6		double system
7 32.4	+19 10		14.5		
7 33.0	+18 10		15.0		
7 33.6	+17 23		15.5		
7 33.7	+18 00	2418	13.7		
7 34.4	+19 45		15.2		
7 34.4	+19 50		15.7		
7 34.4	+20 05		14.9		
7 35.6	+16 58		15.7		diffuse spiral
7 35.8	+16 49		15.3		double system
7 36.0	+20 43		15.6		extremely compact
7 36.2	+19 37		15.4		
7 36.6	+18 18		15.1		
7 37.1	+17 21		15.3		triple system
7 37.6	+20 49		15.2		
7 38.5	+18 50		15.6		compact
7 38.7	+20 53		15.6		
7 39.0	+16 55		15.4		extremely diffuse dwarf system
7 39.0	+18 51		15.5		
7 39.1	+18 41		15.6		
7 39.6	+16 40		15.6		
7 39.8	+18 27		15.2		
7 43.4	+18 30		15.3		
7 44.1	+16 38		15.5		
7 44.2	+17 21		15.7		
7 45.0	+19 13		15.7		
7 45.2	+18 42		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 45.3 +18 40		15.7		double nebula
7 46.0 +17 29		15.4		double system
7 46.9 +18 57		15.1		
7 47.1 +19 42		15.7		diffuse
7 47.7 +16 30	2454	14.7		
7 49.8 +18 30		15.6		
7 51.6 +16 56		14.8		double nebula
7 52.5 +15 13		15.3		
7 52.6 +17 12		15.6		
7 53.2 +19 19		15.7		
7 53.4 +17 09		15.5		





FIELD NO. 88

8^h05^m $+17^\circ30'$

Survey Plate No. 236

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
10841	7 57 53.4	+ 19 57 17	6.28
10868	7 58 39.4	+ 16 35 41	5.91
10897	7 59 53.4	+ 15 05 23	7.14
10948	8 01 52.0	+ 18 59 06	6.06
11114	8 08 10.4	+ 14 46 44	6.14
11189	8 11 19.5	+ 17 49 41	6.43
11311	8 15 25.2	+ 15 50 05	6.61

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0755.2 + 1450	compact	46	1.2	VD	4
0757.8 + 1829	medium compact	150	4.9	D	9
0804.0 + 1627	open	121	7.3	MD	10
0804.8 + 1959	open	468	10.3	MD	8
0805.9 + 1452	open	116	2.0	MD	2
0810.5 + 1907	open	117	4.4	D	7
0811.3 + 1955	compact	112	2.9	VD	6
0813.4 + 1437	medium compact	95	1.2	VD	1
0819.6 + 2209	medium compact	325	21.6	Near	5*
0820.3 + 1603	medium compact	260	4.7	D	3

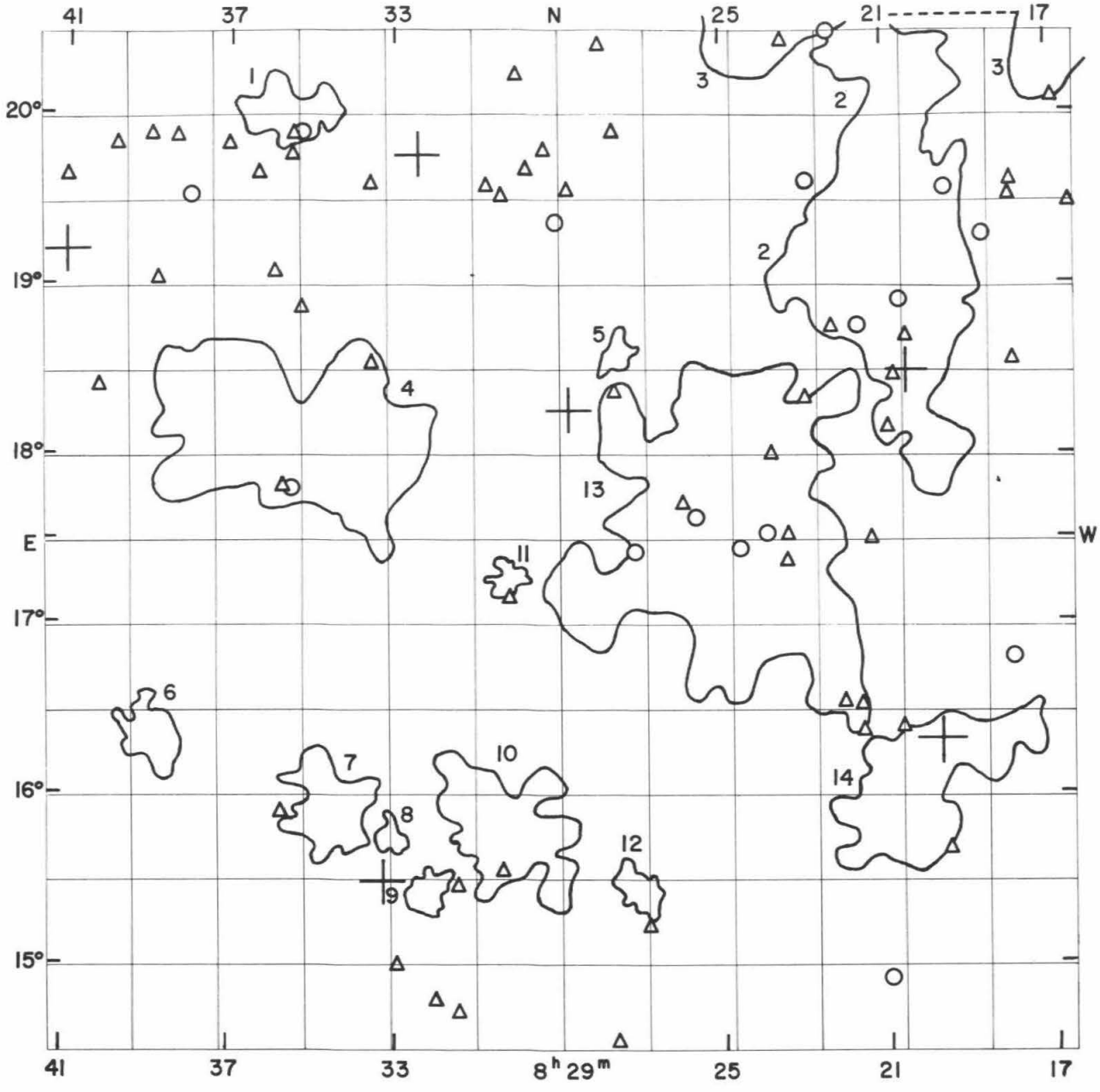
Average number of galaxies per cluster = 181.0

*Cluster 5 is the conventional Cancer Cluster of galaxies

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
7 52.6	+17 12		15.6		
7 53.2	+19 19		15.7		
7 53.4	+17 09		15.5		
7 53.9	+17 03		15.0		
7 53.9	+18 08		14.7		triple system
7 54.1	+15 58		15.2		
7 54.2	+14 31		15.2		diffuse
7 55.0	+16 10		15.3		
7 55.2	+14 49		15.1		
7 56.5	+16 34		15.0		
7 56.5	+18 15		14.9		
7 56.6	+17 37		15.4		
7 56.6	+18 27		15.7		
7 56.8	+15 31		14.0		
7 56.9	+18 33		15.0		
7 57.8	+15 49		15.0		
7 57.8	+16 29		15.4		
7 57.9	+16 40		14.9		
7 58.6	+15 30		14.5		
7 58.8	+15 51	2507	14.0		
7 59.2	+15 11		15.7		
8 00.0	+15 57	2514	14.4		
8 00.1	+16 27		14.7		
8 00.2	+16 29		15.6		
8 00.9	+15 22		15.5		
8 01.1	+15 24		15.4		
8 01.1	+19 30		15.6		
8 01.7	+15 37		15.7		compact
8 01.9	+15 55		15.6		
8 02.2	+14 57		15.6		
8 03.3	+17 51	2522	14.4		
8 04.0	+18 53		15.0		
8 04.0	+19 59		15.4		
8 04.2	+18 54		15.2		
8 04.4	+15 05		15.3		compact
8 04.5	+17 54		15.1		
8 04.9	+15 05		15.3		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 05.0	+17 58	2529-2531	14.7		
8 05.0	+19 03		15.5		
8 05.3	+14 59		15.4		
8 05.6	+19 21		15.7		
8 05.7	+19 35		15.7		
8 05.8	+18 14		15.3		
8 05.9	+18 20		14.9		
8 06.2	+16 49		15.5		
8 06.4	+17 08		14.9		
8 06.4	+19 38		15.6		
8 07.2	+17 25		15.3		
8 09.1	+19 31		14.6		
8 09.9	+17 02		15.4		
8 10.9	+17 11		15.5		
8 11.3	+18 36		15.6		
8 11.4	+18 36		14.6		
8 12.2	+18 02		15.6		compact
8 13.0	+17 10		15.2		
8 13.5	+18 03		15.6		
8 14.4	+18 14		15.7		
8 15.2	+20 07		15.4		
8 16.4	+19 28	2290*	15.2		
8 16.8	+20 04		15.5		



FIELD No. 89

8^h29^m $+17^\circ30'$

Survey Plate No. 1311

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
11412	8 19 42.4	+ 16 19 25	6.72
11438	8 20 30.2	+ 18 29 39	5.88
11659	8 28 44.8	+ 18 15 53	5.57
11762	8 32 27.1	+ 19 45 48	6.55
11785	8 33 19.6	+ 15 29 16	6.28
12001	8 41 04.9	+ 19 12 55	var.

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0819.6 + 2209	medium compact	325	21.6	Near	3*
0820.3 + 1603	medium compact	260	4.7	D	14
0820.8 + 1915	medium compact	560	8.4	MD	2
0824.8 + 1731	open	355	9.8	Near	13
0827.1 + 1526	compact	108	1.5	VD	12
0827.5 + 1835	compact	73	1.1	VD	5
0830.2 + 1547	medium compact	152	4.3	MD	10
0830.3 + 1716	compact	86	1.2	D	11
0832.2 + 1526	medium compact	63	1.4	VD	9
0833.1 + 1545	compact	80	1.1	ED	8
0834.5 + 1555	medium compact	115	3.0	D	7
0835.5 + 1805	medium compact	261	7.3	MD	4
0835.7 + 2000	medium compact	105	2.3	D	1
0838.9 + 1620	compact	104	2.0	VD	6

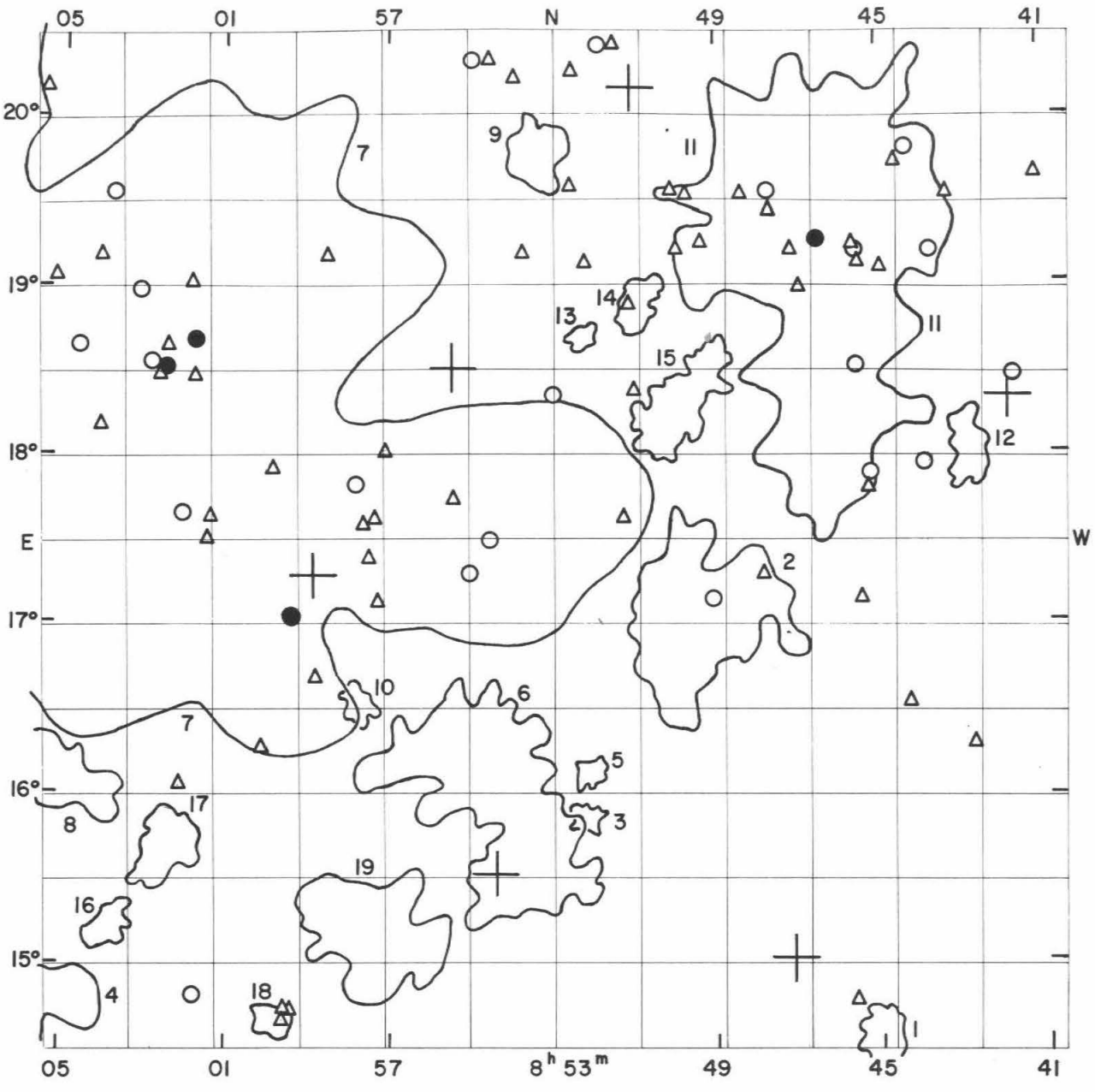
Average number of galaxies per cluster = 189.1

*Cluster No. 3 is the conventional Cancer Cluster of galaxies

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 16.4 + 19 28	2290*	15.2		
8 16.8 + 20 04		15.5		
8 17.9 + 18 33	2309*	15.6		
8 17.9 + 19 35	2307*	15.5		
8 18.0 + 16 48		15.0		double system
8 18.0 + 19 31	2308*	15.6		double nebula, collision
8 18.6 + 19 18	2572	14.8		
8 19.5 + 19 34	2329*	15.0		
8 19.6 + 15 40		15.4		compact
8 20.5 + 18 42	2336*=2337*	15.7		
8 20.6 + 18 55		14.6		
8 20.7 + 16 24		15.6		
8 20.8 + 18 28		15.2		
8 21.0 + 18 09		15.7		very diffuse
8 21.1 + 14 55		14.4		
8 21.4 + 17 29		15.1		
8 21.7 + 16 22		15.7		
8 21.7 + 16 32		15.7		
8 21.7 + 18 46	2351*	14.4		
8 22.1 + 16 33		15.7		
8 22.3 + 18 45		15.6		
8 22.4 + 20 30	2582=2359*	14.3		
8 22.9 + 19 36	2363*	15.0		
8 23.0 + 18 20		15.4		
8 23.5 + 17 22		15.1		double nebula
8 23.5 + 17 31		15.5		
8 23.5 + 20 26	2369*	15.2		
8 23.8 + 18 00		15.6		
8 24.0 + 17 32	2593	14.9		
8 24.6 + 17 27	2596	14.2		
8 25.7 + 17 38		14.3		
8 26.1 + 17 43		15.3		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 26.8 +15 14		15.2		double system
8 27.2 +17 26		14.4		
8 27.6 +14 33		15.6		double nebula, collision
8 27.6 +19 54		15.6		
8 27.7 +18 22		15.5		double nebula, tidal effect
8 28.0 +20 25		15.6		extremely diffuse
8 28.8 +19 33		15.7		
8 29.1 +19 23		14.9		
8 29.4 +19 47		15.4		
8 29.8 +19 41		15.7		extremely diffuse
8 30.0 +20 14		15.7		
8 30.2 +17 09		15.3		
8 30.4 +15 32		15.7		
8 30.4 +19 31		15.5		
8 30.8 +19 34		15.6		double system
8 31.5 +14 43		15.6		
8 31.5 +15 27		15.5		
8 32.0 +14 47		15.7		
8 33.0 +15 00		15.7		
8 33.6 +18 32		15.7		
8 33.6 +19 36		15.6		compact
8 35.3 +18 52		15.2		
8 35.3 +19 54	2624	14.5		
8 35.5 +19 46		15.2		double system
8 35.5 +19 53	2625	15.1		
8 35.6 +17 48		14.9		
8 35.8 +15 54		15.6		compact
8 35.8 +17 48		15.7		
8 36.0 +19 04		15.6		
8 36.3 +19 39		15.6		
8 37.1 +19 49	2388*	15.7		
8 38.0 +19 32		14.8		
8 38.3 +19 52		15.4		
8 38.8 +19 02		15.4		
8 38.9 +19 53	2390*	15.6		
8 39.8 +19 50	2647	15.2		compact
8 40.3 +18 24		15.1		
8 41.1 +19 37		15.7		



FIELD No. 90

8^h53^m $+17^o30'$

Survey Plate No. 62

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12022	8 41 50.8	+ 18 20 22	4.17
12179	8 47 09.0	+ 15 01 12	7.24
12284	8 51 03.9	+ 20 09 27	6.82
12373	8 54 27.8	+ 15 30 56	5.16
12396	8 55 28.7	+ 18 30 09	6.56
12475	8 58 55.4	+ 17 16 42	7.11

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0842.8 + 1802	medium compact	156	1.9	ED	12
0844.9 + 1434	medium compact	69	1.8	D	1
0846.3 + 1910	medium compact	267	10.4	Near	11
0849.4 + 1702	open	195	5.3	D	2
0849.9 + 1816	medium compact	114	2.8	D	15
0850.9 + 1852	medium compact	64	1.5	ED	14
0852.1 + 1606	compact	93	1.0	ED	5
0852.2 + 1551	compact	95	1.0	ED	3
0852.3 + 1840	compact	81	0.8	ED	13
0853.4 + 1945	open	90	2.1	VD	9
0854.2 + 1600	medium compact	317	6.0	MD	6
0857.3 + 1510	medium compact	121	4.3	D	19
0857.7 + 1630	compact	93	1.3	ED	10
0859.7 + 1438	compact	81	1.2	ED	18
0902.3 + 1540	medium compact	129	2.0	ED	17
0903.8 + 1512	compact	102	1.4	VD	16
0904.9 + 1606	medium compact	180	2.7	MD	8
0906.1 + 1447	medium compact	281	4.3	D	4
0909.7 + 1814	open	1306	31.7	Near	7

Average number of galaxies per cluster = 201.8

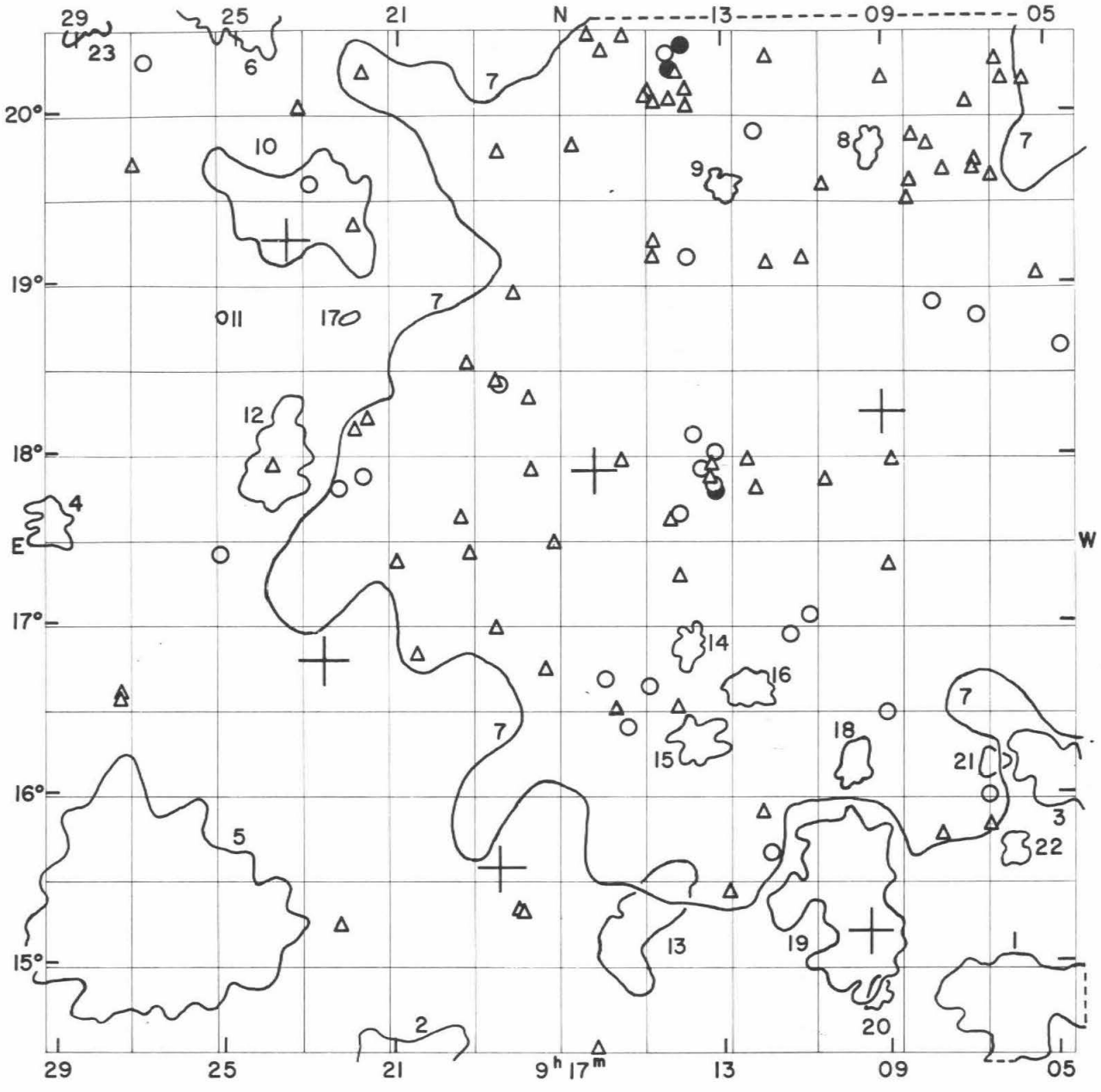
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 41.1	+19 37		15.7		
8 41.7	+18 28	2392*	14.6		
8 42.8	+16 16		15.7		
8 43.3	+19 32		15.4		diffuse
8 43.8	+19 12		15.0		
8 43.9	+17 56	2398*	14.8		
8 44.3	+19 49		15.0		
8 44.4	+16 31		15.5		
8 44.6	+19 44		15.6		compact
8 45.0	+19 05	2399*	15.6		diffuse
8 45.3	+17 54	2406*	14.4		
8 45.4	+17 48	2407*	15.1		
8 45.5	+17 09		15.5		
8 45.5	+19 08		15.7		
8 45.6	+18 31	2409*	14.4		
8 45.6	+19 12	2410*	14.8		
8 45.7	+14 46		15.6		
8 45.7	+19 14	2411*	15.4		
8 46.5	+19 16	2672 2673	13.1	13.4 + 4223 14.4 + 3792	double system m_H = 12.6 E --
8 47.0	+18 58	2414*	15.7		
8 47.2	+19 12	2677	15.2		
8 47.7	+19 25		15.6		
8 47.7	+19 34		14.9		
8 47.9	+17 17		15.3		
8 48.5	+19 32		15.3		
8 49.1	+17 08		14.5		
8 49.4	+19 15		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 49.8 +19 31		15.7		
8 50.0 +19 12		15.7		
8 50.1 +19 32		15.7		
8 51.0 +18 22		15.3		
8 51.1 +18 52		15.6		
8 51.3 +17 37		15.2		compact
8 51.5 +20 25	2422*	15.6		extremely compact
8 51.9 +20 25	2423*	14.7		
8 52.3 +19 07		15.5		very diffuse
8 52.6 +20 14		15.6		
8 52.7 +19 34		15.7		
8 53.0 +18 21		14.9		
8 53.8 +19 11		15.7		
8 54.0 +20 12		15.7		
8 54.5 +17 29	2711	14.6		
8 54.6 +20 19		15.7		
8 55.0 +20 19		14.9		double system
8 55.1 +17 17		14.7		
8 55.5 +17 44		15.7		
8 57.1 +18 01		15.5		double nebula
8 57.3 +17 07		15.5		
8 57.4 +17 36		15.2		
8 57.6 +17 22		15.7		
8 57.7 +17 34		15.3		
8 57.9 +17 49		14.7		
8 58.6 +19 10		15.4		
8 58.8 +16 40		15.6		
8 59.4 +14 43		15.6		
8 59.5 +14 44		15.5		
8 59.5 +17 02	2730	13.7		
8 59.6 +14 40		15.7		
8 59.9 +17 55		15.5		double nebula
9 00.1 +16 15		15.6		
9 01.4 +17 37		15.4		
9 01.5 +17 29		15.6		
9 01.7 +14 48	2431*	14.3		quadruple system
9 01.8 +18 27	2745	15.5		compact
9 01.8 +18 39	2744	13.7	+ 3450	double nebula, tidal effect
9 01.9 +19 00		15.1		
9 02.1 +16 02		15.7		diffuse
9 02.1 +17 39		14.8		
9 02.5 +18 30	2749	13.3	+ 4203	m_H = 13.1
9 02.5 +18 38	2747	15.5		
9 02.7 +18 27	2751	15.1		
9 02.9 +18 32	2752	14.8		
9 03.1 +18 58		14.8		
9 03.8 +19 32		15.0		
9 04.1 +18 10		15.6		
9 04.1 +19 10		15.4		
9 04.7 +18 38	2761	14.8		
9 05.3 +19 02		15.7		
9 05.6 +20 10		15.7		double system

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2672	-	-	13.58	E1	13.2	E1	-	-
2673	-	-	14.45	E0	14.4	E0	-	-
2744	-	-	13.75	Sb	13.8	Sb	-	-
2749	-	-	13.65	E2	13.5	E2	-	-



FIELD No. 91

9^h17^m $+17^\circ30'$

Survey Plate No. 57

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
12685	9 09 08.6	+ 18 15 00	6.75
12693	9 09 33.5	+ 15 11 55	6.40
12841	9 16 11.6	+ 17 55 06	6.60
12894	9 18 29.9	+ 15 35 04	6.49
12990	9 22 46.5	+ 16 48 09	6.27
13008	9 23 46.3	+ 19 16 36	7.55

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0906.0 + 1540	compact	68	1.0	ED	22
0906.1 + 1447	medium compact	281	4.3	D	1
0906.6 + 1611	compact	67	0.9	ED	21
0904.9 + 1606	medium compact	180	2.7	MD	3
0909.3 + 1450	compact	60	1.0	VD	20
0909.4 + 1947	compact	82	1.0	ED	8
0909.7 + 1814	open	1306	31.7	Near	7
0909.9 + 1611	compact	119	1.3	VD	18
0910.0 + 1523	medium compact	205	4.3	MD	19
0912.4 + 1637	medium compact	85	1.4	VD	16
0913.0 + 1934	compact	67	1.0	ED	9
0913.7 + 1620	open	80	1.5	VD	15
0913.9 + 1652	medium compact	93	1.1	ED	14
0915.1 + 1515	medium compact	132	3.0	MD	13
0920.9 + 1425	compact	258	2.5	VD	2
0922.1 + 1847	compact	46	0.5	ED	17
0923.3 + 1926	medium compact	172	4.1	D	10
0923.9 + 1758	medium compact	102	2.6	D	12
0925.0 + 2042	compact	315	3.3	VD	6
0925.3 + 1848	compact	48	0.4	ED	11
0926.8 + 1520	medium compact	671	7.7	MD	5
0928.8 + 2034	medium compact	103	1.4	ED	23
0929.5 + 1734	medium compact	71	1.5	VD	4

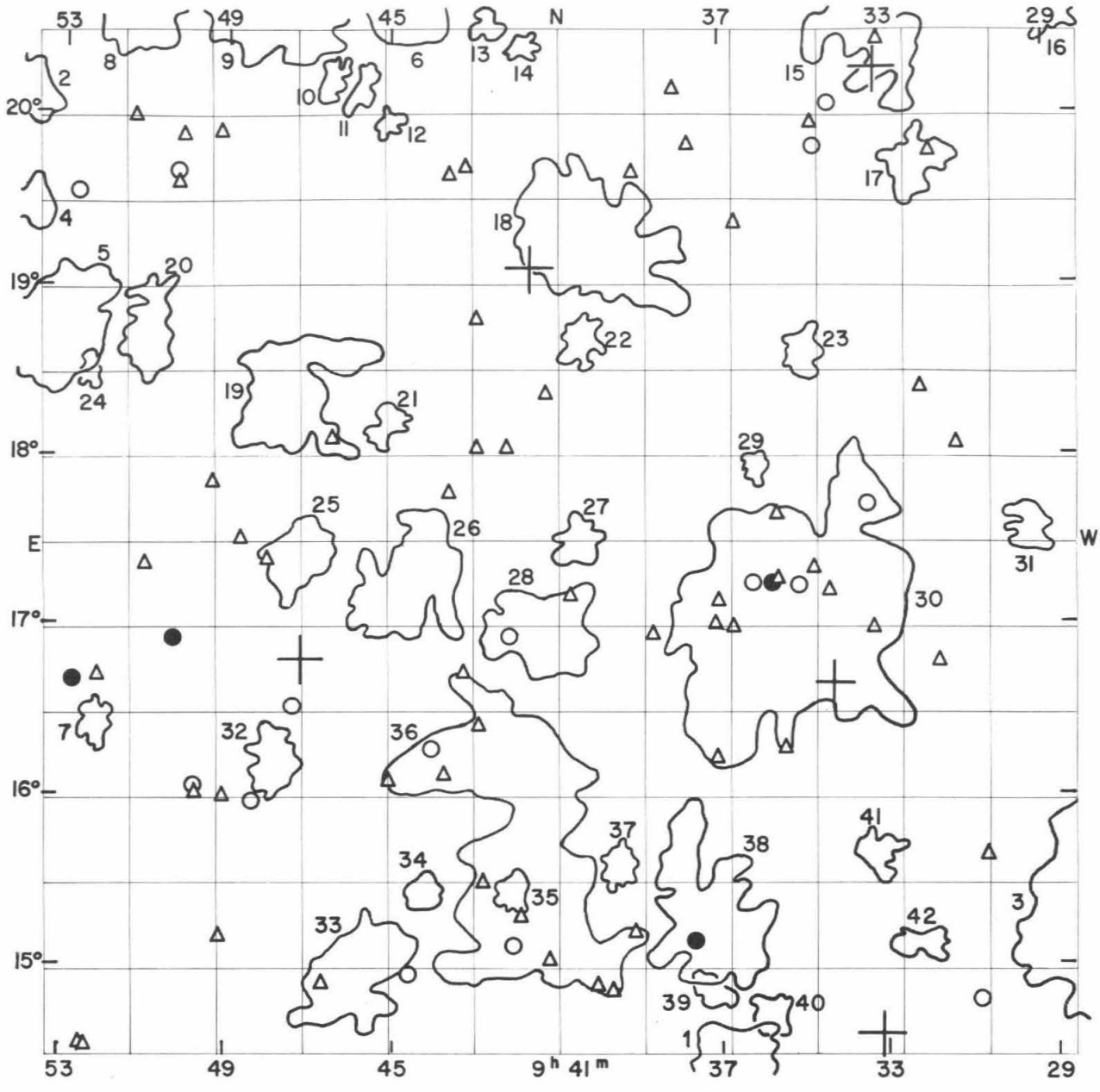
Average number of galaxies per cluster = 200.5

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 04.7 +18 38	2761	14.8		
9 05.3 +19 02		15.7		
9 05.6 +20 10		15.7		double system
9 06.1 +20 12		15.7		
9 06.3 +20 18		15.7		
9 06.4 +19 37		15.3		
9 06.6 +15 49		15.6		
9 06.6 +16 00	528*	14.6		spiral with 4 companions
9 06.8 +18 49		14.8		
9 06.8 +19 43		15.7		
9 06.8 +20 40		15.2		
9 07.0 +20 04		15.7		very diffuse
9 07.6 +19 40		15.6		
9 07.8 +15 45		15.7		
9 07.8 +18 54	2774	14.8		
9 08.0 +19 49		15.6		double system
9 08.3 +19 52		15.7		
9 08.4 +19 36		15.4		
9 08.5 +19 30		15.3		
9 08.9 +17 58		15.3		
9 09.0 +17 21		15.4		
9 09.0 +20 12		15.5		
9 09.1 +16 29		15.0		
9 10.5 +17 51		15.1		extremely compact
9 10.6 +19 35		15.5		very diffuse

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
9	10.9	+17 04		14.9		
9	11.1	+19 09		15.4		very compact
9	11.4	+16 57		14.7		
9	11.9	+15 40		14.2		
9	11.9	+19 07		15.5		
9	12.0	+20 20		15.7		very compact
9	12.1	+15 54		15.6		
9	12.2	+17 48	2791	15.6		
9	12.2	+19 55	2790	14.7		
9	12.5	+17 59		15.3		
9	12.9	+15 26		15.1		
9	13.2	+17 48	2794	14.0		
9	13.2	+18 02	2454*	14.4		
9	13.3	+17 50	2795	14.1		
9	13.3	+17 57		15.7		compact
9	13.4	+17 52		15.5		
9	13.6	+17 56	2797	14.3		
9	13.8	+18 08		14.8		
9	13.9	+19 10	2802+2803	14.3		double system with bridge
9	13.9	+20 03		15.6		compact
9	13.9	+20 08	2801	15.4		
9	14.0	+20 24	2804	14.0		
9	14.1	+17 17		15.4		
9	14.1	+17 41		15.0		
9	14.2	+16 31		15.5		
9	14.2	+20 14	2807	15.1		double system
9	14.3	+17 38		15.4		
9	14.3	+20 05		15.6		
9	14.3	+20 16	2809	13.9		
9	14.4	+20 21		15.0		
9	14.7	+19 10		15.4		
9	14.7	+19 16		15.5		
9	14.7	+20 04		15.7		
9	14.8	+16 40		14.8		
9	14.8	+20 07	2812	15.7		
9	14.9	+20 06	2813	15.4		
9	15.4	+16 25	2819	14.3		
9	15.5	+17 58		15.4		
9	15.5	+20 28		15.5		
9	15.6	+16 31		15.2		
9	15.9	+16 42		15.0		
9	16.0	+20 22		15.7		extremely compact
9	16.1	+14 31		15.6		
9	16.4	+20 27		15.4		
9	16.7	+19 50		15.5		double nebula
9	17.2	+17 29		15.5		
9	17.4	+16 45		15.6		diffuse
9	17.7	+17 55		15.1		
9	17.8	+18 20		15.3		
9	17.9	+15 19		15.2		
9	18.0	+15 20		15.6		
9	18.2	+18 57		15.5		
9	18.5	+18 26		14.9		
9	18.6	+16 59		15.5		
9	18.6	+18 27		15.5		compact
9	18.6	+19 46		15.7		
9	19.2	+17 25		15.3		
9	19.3	+18 33		15.2		
9	19.5	+17 38		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 20.5 +16 50		15.5		
9 21.0 +17 22		15.2		extremely compact
9 21.7 +18 13		15.5		
9 21.8 +17 53		14.9		
9 21.9 +20 14		15.5		diffuse
9 22.0 +18 09		15.6		
9 22.1 +19 22		15.6		very diffuse
9 22.3 +15 14		15.7		
9 22.4 +17 49		14.6		
9 23.2 +19 36		14.4		
9 23.5 +20 01		15.2		
9 24.0 +17 56		15.6		
9 25.3 +17 25		14.5		
9 27.3 +20 17	2489*	14.2		
9 27.5 +19 40		15.3		
9 27.6 +16 34		15.7		
9 27.6 +16 35		15.5		



FIELD No. 92

9^h41^m $+17^\circ30'$

Survey Plate No. 1509

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
13250	9 33 09.1	+ 14 36 13	6.21
13253	9 33 13.8	+ 20 16 11	7.19
13277	9 34 17.2	+ 16 39 47	5.92
13422	9 41 43.3	+ 19 05 40	6.64
13536	9 47 13.5	+ 16 47 36	8.5

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0926.8 + 1520	medium compact	671	7.7	MD	3
0928.8 + 2034	medium compact	103	1.4	ED	16
0929.5 + 1734	medium compact	71	1.5	VD	31
0932.2 + 1508	open	59	1.3	ED	42
0932.3 + 1942	medium compact	78	1.9	VD	17
0933.2 + 1540	medium compact	70	1.4	VD	41
0933.2 + 2022	medium compact	101	3.0	MD	15
0935.0 + 1835	compact	80	1.4	VD	23
0935.3 + 1701	medium compact	177	7.8	Near	30
0935.8 + 1442	compact	146	1.3	ED	40
0936.1 + 1755	compact	69	0.9	ED	29
0936.7 + 1425	medium compact	246	2.6	D	1
0937.2 + 1516	medium compact	264	4.2	D	38
0937.3 + 1452	compact	73	1.2	VD	39
0939.5 + 1535	medium compact	78	1.3	ED	37
0940.0 + 1915	medium compact	140	4.5	D	18
0940.4 + 1840	medium compact	88	1.5	ED	22
0940.5 + 1729	compact	88	1.5	VD	27
0941.4 + 1658	compact	211	3.2	VD	28
0941.6 + 1540	open	142	7.0	Near	36
0941.7 + 2430	open	770	33.6	Near	6
0941.8 + 2023	compact	67	0.9	ED	14
0942.0 + 1526	compact	97	1.2	ED	35
0942.7 + 2030	compact	60	1.0	ED	13
0944.2 + 1526	compact	73	1.2	ED	34
0944.6 + 1715	open	196	3.5	VD	26
0945.1 + 1810	medium compact	82	1.2	VD	21
0945.1 + 1956	compact	57	0.8	ED	12
0945.8 + 2009	compact	97	1.0	ED	11
0945.9 + 1458	medium compact	118	3.3	MD	33
0946.5 + 2010	compact	86	1.1	ED	10
0947.2 + 1723	compact	168	2.2	ED	25
0947.2 + 1821	medium compact	213	3.5	VD	19
0947.8 + 1612	compact	98	1.8	VD	32
0948.0 + 2036	medium compact	252	3.8	D	9
0950.9 + 1843	open	91	2.2	VD	20
0951.5 + 2037	medium compact	207	3.3	VD	8
0952.2 + 1625	compact	56	1.2	ED	7
0952.4 + 1829	compact	51	0.9	ED	24
0953.4 + 1845	compact	172	3.7	VD	5
0954.8 + 2016	open	120	2.9	VD	2
0955.2 + 1924	medium compact	144	3.0	D	4

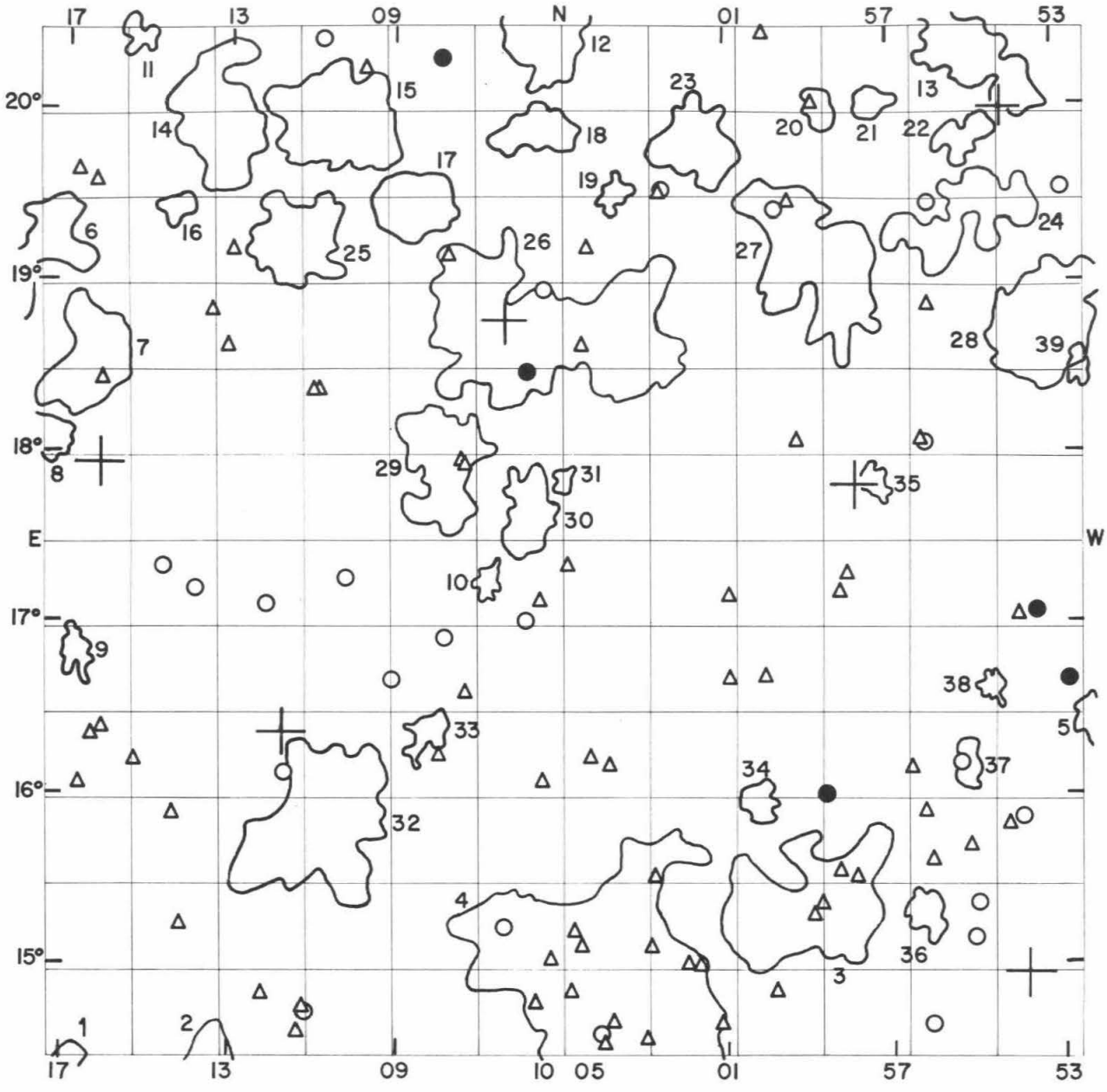
Average number of galaxies per cluster = 148.3

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
9 30.6 +15 39		15.5		
9 30.8 +14 48		15.0		
9 31.3 +18 03		15.6		
9 31.8 +16 47		15.6		very diffuse
9 31.9 +19 46		15.2		
9 32.2 +18 23		15.7		

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	o '				
9 33.1	+ 20 25		15.7		
9 33.3	+ 16 59	2923	15.2		
9 33.5	+ 17 43		15.0		
9 34.4	+ 20 03		14.3		
9 34.5	+ 17 12	2928	15.2		
9 34.7	+ 19 49		14.6		
9 34.8	+ 17 20		15.5		
9 34.8	+ 19 56		15.3		
9 35.2	+ 17 15	2933+2934	14.9		double system
9 35.5	+ 16 17		15.6		
9 35.6	+ 17 17	2941	15.1		
9 35.7	+ 17 38		15.4		
9 35.8	+ 17 16	2943	14.0		
9 36.3	+ 17 15	2946	14.8		
9 36.7	+ 19 20		15.4		double nebula, collision
9 36.8	+ 16 59		15.5		double system
9 37.1	+ 16 14		15.4		
9 37.1	+ 17 08		15.2		
9 37.2	+ 17 01	2949	15.5		double system
9 37.7	+ 15 09	2954	13.5		
9 37.8	+ 19 48		15.7		
9 38.2	+ 20 07		15.7		
9 38.7	+ 16 56		15.7		
9 39.1	+ 15 12		15.2		
9 39.1	+ 19 38		15.7		
9 39.6	+ 14 51		15.6		double nebula
9 40.0	+ 14 54		15.5		compact
9 40.7	+ 17 10		15.7		extremely diffuse
9 41.2	+ 15 02		15.7		diffuse
9 41.3	+ 18 21		15.3		
9 41.9	+ 15 17		15.1		
9 42.0	+ 15 07		15.0		triple nebula
9 42.2	+ 16 56		14.3		
9 42.2	+ 18 02		15.2		
9 42.8	+ 15 29		15.6		double nebula
9 42.9	+ 16 25		15.5		
9 43.0	+ 18 02		15.6		
9 43.0	+ 18 47		15.6		
9 43.3	+ 16 43		15.1		compact
9 43.3	+ 19 40		15.4		diffuse
9 43.6	+ 19 38		15.5		
9 43.7	+ 17 46		15.7		double system
9 43.8	+ 16 08		15.3		
9 44.1	+ 16 17		14.9		
9 44.6	+ 14 58		15.0		
9 45.1	+ 16 05	565*	15.1		double system
9 46.5	+ 18 05		15.7		
9 46.7	+ 14 54		15.4		
9 47.5	+ 16 32		14.9		
9 48.0	+ 17 22		15.7		
9 48.4	+ 15 58	568*	14.8		
9 48.7	+ 17 30		15.7		very diffuse
9 49.1	+ 15 10		15.3		diffuse
9 49.1	+ 16 00	570*	15.6		
9 49.3	+ 19 53		15.1		
9 49.4	+ 17 50		15.6		very diffuse
9 49.8	+ 16 01	571*	15.3		compact
9 49.8	+ 16 04	572*	14.8		
9 50.1	+ 19 51		15.2		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 50.2 +19 36		15.4		
9 50.2 +19 40	3040	14.2		double system
9 50.4 +16 55	3041	13.1		m_H= 12.7 S
9 51.0 +17 20		15.6		
9 51.4 +19 58		15.6		compact
9 52.2 +16 42	3048	15.2		double system
9 52.4 +14 32		15.1		
9 52.5 +14 33		15.4		
9 52.8 +16 40	3053	13.7		
9 52.8 +19 33		14.8		



FIELD No. 93

10^h05^m $+17^\circ30'$

Survey Plate No. 1356

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
13681	9 53 54.5	+ 14 57 50	7.54
13692	9 54 16.8	+ 20 00 03	7.70
13762	9 57 57.7	+ 17 48 28	7.9
13939	10 06 23.9	+ 18 46 38	7.11
14061	10 11 49.2	+ 16 23 14	7.31
14152	10 16 14.6	+ 17 57 25	6.62

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0952.2 + 1625	compact	56	1.2	ED	5
0952.4 + 1829	compact	51	0.9	ED	39
0953.4 + 1845	compact	172	3.7	VD	28
0954.7 + 1636	compact	73	0.9	ED	38
0954.8 + 2016	open	120	2.9	VD	13
0955.1 + 1950	compact	125	1.5	VD	22
0955.2 + 1924	medium compact	144	3.0	D	24
0955.3 + 1608	compact	77	1.2	ED	37
0956.3 + 1516	medium compact	86	1.3	ED	36
0957.4 + 1749	compact	67	0.9	ED	35
0957.4 + 2002	medium compact	60	1.2	ED	21
0958.7 + 2000	medium compact	93	1.2	ED	20
0958.8 + 1906	open	167	4.2	VD	27
0959.2 + 1520	open	107	4.5	D	3
1000.4 + 1555	medium compact	81	1.2	ED	34
1001.8 + 1947	open	106	2.3	ED	23
1003.6 + 1443	open	306	8.4	Near	4
1003.7 + 1930	medium compact	57	1.1	ED	19
1005.0 + 1750	compact	56	0.7	ED	31
1005.3 + 1840	medium compact	327	5.4	MD	26
1005.5 + 2025	medium compact	121	2.4	VD	12
1005.6 + 1953	medium compact	104	1.9	ED	18
1005.8 + 1739	compact	142	1.9	VD	30
1006.9 + 1715	medium compact	87	0.9	ED	10
1007.9 + 1755	medium compact	204	3.4	VD	29
1008.3 + 1620	compact	85	1.3	ED	33
1008.6 + 1926	medium compact	111	2.2	D	17
1010.5 + 1956	compact	269	3.6	D	15
1010.9 + 1549	medium compact	156	4.5	D	32
1011.5 + 1914	open	96	2.5	VD	25
1013.4 + 1955	open	140	3.5	VD	14
1013.7 + 1422	open	169	2.5	VD	2
1014.4 + 1925	medium compact	79	0.9	ED	16
1015.4 + 2025	medium compact	95	1.1	VD	11
1016.3 + 1831	medium compact	90	3.0	D	7
1016.8 + 1649	medium compact	71	1.2	ED	9
1017.0 + 1414	compact	260	2.7	D	1
1017.4 + 1805	compact	59	1.4	VD	8
1017.7 + 1909	medium compact	98	2.9	D	6

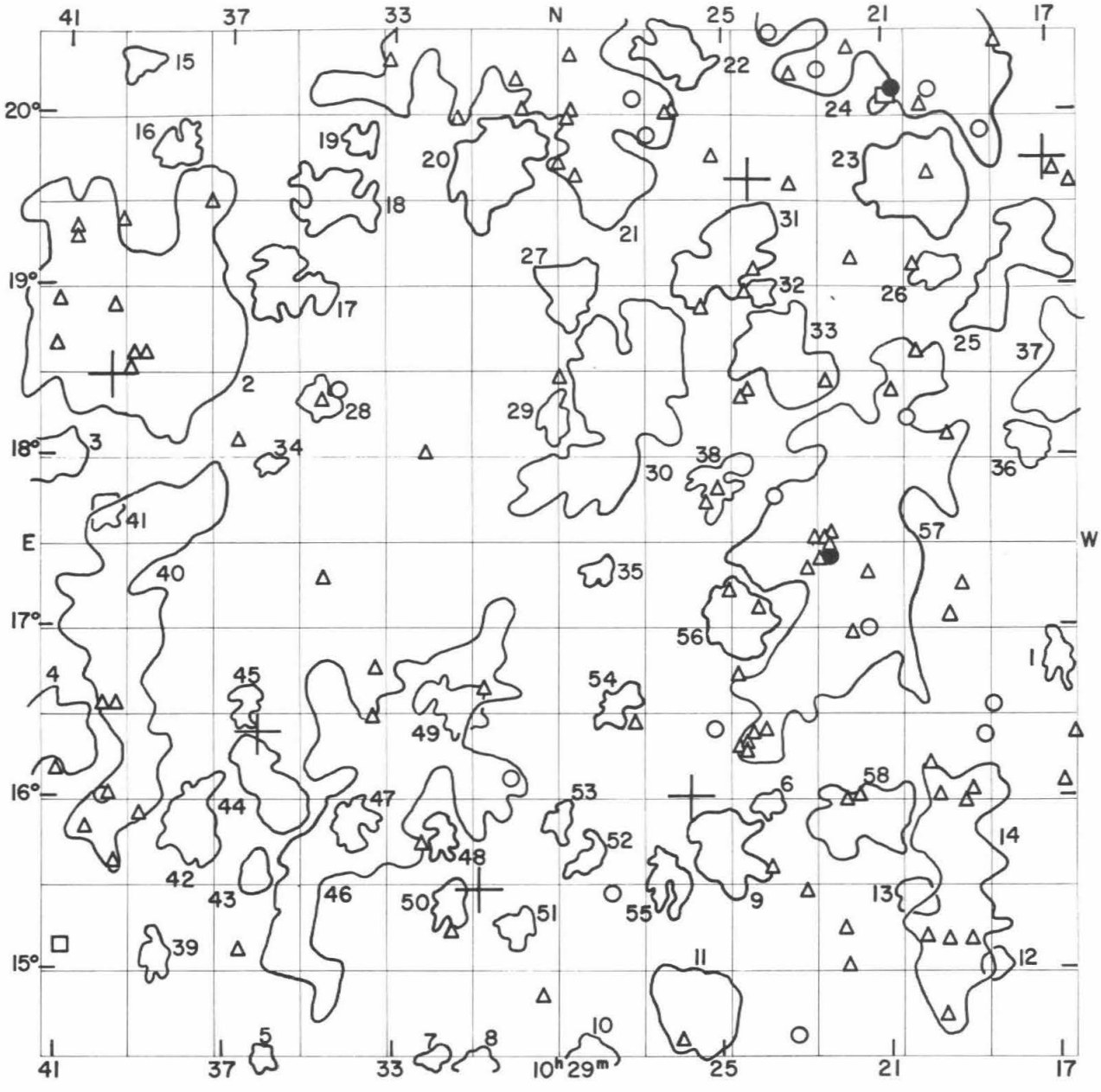
Average number of galaxies per cluster = 122.2

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 52.8 +16 40	3053	13.7		
9 52.8 +19 33		14.8		
9 53.6 +17 05	3060	13.8		
9 54.0 +15 53		14.3		
9 54.0 +17 03		15.5		
9 54.4 +15 48		15.1		
9 55.1 +15 22		14.8		
9 55.2 +15 10		15.0		
9 55.3 +15 42		15.5		

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	o '				
9 55.5	+16 10	581*	15.0		triple system
9 56.1	+19 27		15.0		
9 56.2	+14 39	3075	14.5		
9 56.2	+15 37		15.1		
9 56.2	+18 52		15.7		
9 56.3	+15 55		15.2		compact
9 56.3	+18 03	582*	14.7		
9 56.4	+18 04	583*	15.2		
9 56.6	+16 09		15.5		diffuse
9 58.0	+15 31		15.5		diffuse
9 58.1	+17 18		15.6		
9 58.4	+15 34		15.6		
9 58.4	+17 10		15.3		diffuse
9 58.7	+16 01	3094	13.5		
9 58.8	+15 22		15.5		
9 58.9	+20 02		15.6		double nebula, collision
9 59.0	+15 18		15.6		double system
9 59.4	+18 04		15.6		
9 59.5	+19 27		15.7		
9 59.9	+19 25		14.6		
10 00.0	+14 52		15.5		
10 00.1	+16 42		15.4		
10 00.1	+20 27		15.7		
10 01.0	+16 41		15.4		compact
10 01.0	+17 10		15.7		
10 01.2	+14 40		15.3		
10 01.7	+15 00		15.4		
10 02.0	+15 01		15.6		very compact
10 02.6	+19 30		15.2		
10 02.6	+19 31		14.3		
10 02.8	+15 06		15.7		
10 02.8	+15 31		15.2		
10 03.0	+14 35		15.3		
10 03.9	+14 41		15.1		double nebula
10 03.9	+16 11		15.4		
10 04.0	+14 33	3119	15.3		compact
10 04.1	+14 37	3121	14.2		double nebula
10 04.4	+16 14		15.1		diffuse
10 04.4	+19 11		15.4		
10 04.5	+18 37		15.7		
10 04.6	+15 07		15.7		
10 04.8	+14 51		15.5		
10 04.8	+15 13		15.3		double nebula
10 04.9	+17 20		15.1		extremely compact
10 05.4	+15 03		15.1		diffuse
10 05.5	+16 05		15.6		
10 05.5	+18 57		14.3		
10 05.6	+17 09		15.1		
10 05.7	+14 48		15.4		
10 05.9	+17 02		15.0		
10 05.9	+18 29	3131	14.0		
10 06.5	+15 15		14.5		
10 07.4	+16 37		15.5		
10 07.4	+17 56		15.5		
10 07.5	+17 58		15.6		
10 07.8	+19 09		15.5		
10 07.9	+16 56		14.9		
10 08.0	+16 15		15.6		
10 08.0	+20 18		14.0		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
10	09.1	+16	41		14.7		
10	09.8	+20	14		15.6		
10	10.3	+17	17	3154	14.3		triple system
10	10.8	+20	25		14.9		
10	11.0	+18	22		15.5		
10	11.1	+18	22		15.3		
10	11.2	+14	45		14.7		
10	11.3	+14	47		15.2		double system
10	11.4	+14	38		15.6		
10	11.7	+16	09		14.8		
10	12.2	+17	07		15.0		
10	12.3	+14	51		15.7		
10	13.0	+19	11		15.2		
10	13.1	+18	37		15.7		
10	13.5	+18	50		15.4		
10	13.9	+17	13		14.9		
10	14.2	+15	15		15.6		double nebula
10	14.4	+15	55		15.4		
10	14.7	+17	20		15.0		
10	15.3	+16	12		15.6		
10	16.1	+16	24	2562*	15.2		
10	16.1	+18	25		15.6		
10	16.4	+16	21		15.6		
10	16.4	+19	35		15.7		
10	16.7	+16	05		15.7		
10	16.8	+19	38		15.3		



FIELD No. 94

10^h29^m $+17^o30'$

Survey Plate No. 58

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
14170	10 17 01.0	+ 19 43 31	4.97
14340	10 24 17.5	+ 19 37 11	6.29
14380	10 25 45.6	+ 16 00 41	7.17
14506	10 30 52.7	+ 15 28 19	8.9
14633	10 36 13.8	+ 16 23 18	6.62
14718	10 39 50.6	+ 18 28 56	7.17

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1016.3 + 1831	medium compact	90	3.0	D	37
1016.8 + 1649	medium compact	71	1.2	ED	1
1017.4 + 1805	compact	59	1.4	VD	36
1017.7 + 1909	medium compact	98	2.9	D	25
1018.5 + 1501	compact	58	1.0	ED	12
1019.3 + 1527	medium compact	148	4.6	Near	14
1019.8 + 1905	medium compact	69	1.3	VD	26
1020.1 + 1939	medium compact	164	3.2	D	23
1020.1 + 2046	open	256	8.1	Near	24
1020.3 + 1526	compact	86	1.3	ED	13
1021.6 + 1554	medium compact	130	2.6	VD	58
1021.8 + 1725	medium compact	318	7.8	Near	57
1023.5 + 1835	compact	135	2.9	VD	33
1023.9 + 1559	medium compact	55	0.7	ED	6
1024.0 + 1858	medium compact	56	0.8	ED	32
1024.6 + 1703	open	103	2.2	VD	56
1025.0 + 1542	open	74	2.3	VD	9
1025.0 + 1910	medium compact	106	2.9	VD	31
1025.1 + 1750	compact	144	1.6	ED	38
1025.6 + 1446	medium compact	149	2.7	VD	11
1026.0 + 2022	medium compact	91	1.8	MD	22
1026.3 + 1534	compact	230	1.5	ED	55
1027.4 + 1816	open	213	5.0	D	30
1027.5 + 1634	medium compact	114	1.3	ED	54
1028.0 + 1720	compact	65	0.8	ED	35
1028.1 + 1429	compact	147	1.5	VD	10
1028.2 + 1540	compact	75	1.1	ED	52
1028.7 + 1858	compact	118	1.9	VD	27
1028.9 + 1553	medium compact	74	1.0	ED	53
1029.0 + 1815	medium compact	74	1.3	ED	29
1029.8 + 2023	open	226	7.4	Near	21
1030.0 + 1515	compact	63	1.2	ED	51
1030.5 + 1944	open	142	3.0	D	20
1030.8 + 1426	open	85	1.4	VD	8
1031.5 + 1524	compact	92	1.3	ED	50
1031.5 + 1634	medium compact	99	1.7	VD	49
1031.8 + 1430	medium compact	60	1.0	VD	7
1031.8 + 1547	medium compact	107	1.2	ED	48
1033.0 + 1604	open	369	6.6	MD	46
1033.8 + 1952	compact	90	1.1	ED	19
1033.9 + 1552	medium compact	158	1.4	ED	47
1034.4 + 1932	open	99	2.0	D	18
1034.8 + 1820	medium compact	103	1.3	VD	28
1035.6 + 1901	medium compact	174	2.1	D	17
1035.9 + 1429	medium compact	76	1.0	ED	5
1035.9 + 1605	medium compact	106	2.3	VD	44
1036.0 + 1759	compact	54	0.8	ED	34
1036.2 + 1534	open	86	1.2	ED	43
1036.4 + 1632	open	77	1.2	ED	45
1037.8 + 1550	medium compact	150	2.2	ED	42
1038.2 + 1948	medium compact	118	1.4	VD	16
1038.6 + 1505	compact	63	1.2	ED	39
1039.2 + 2020	medium compact	76	1.2	ED	15
1039.4 + 1649	medium compact	164	5.7	Near	40
1039.4 + 1853	open	339	7.2	MD	2
1039.9 + 1740	medium compact	60	1.1	ED	41

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1041.4 + 1759	compact	143	1.8	ED	3
1042.3 + 1614	open	146	4.0	D	4

Average number of galaxies per cluster = 122.3

GALAXIES

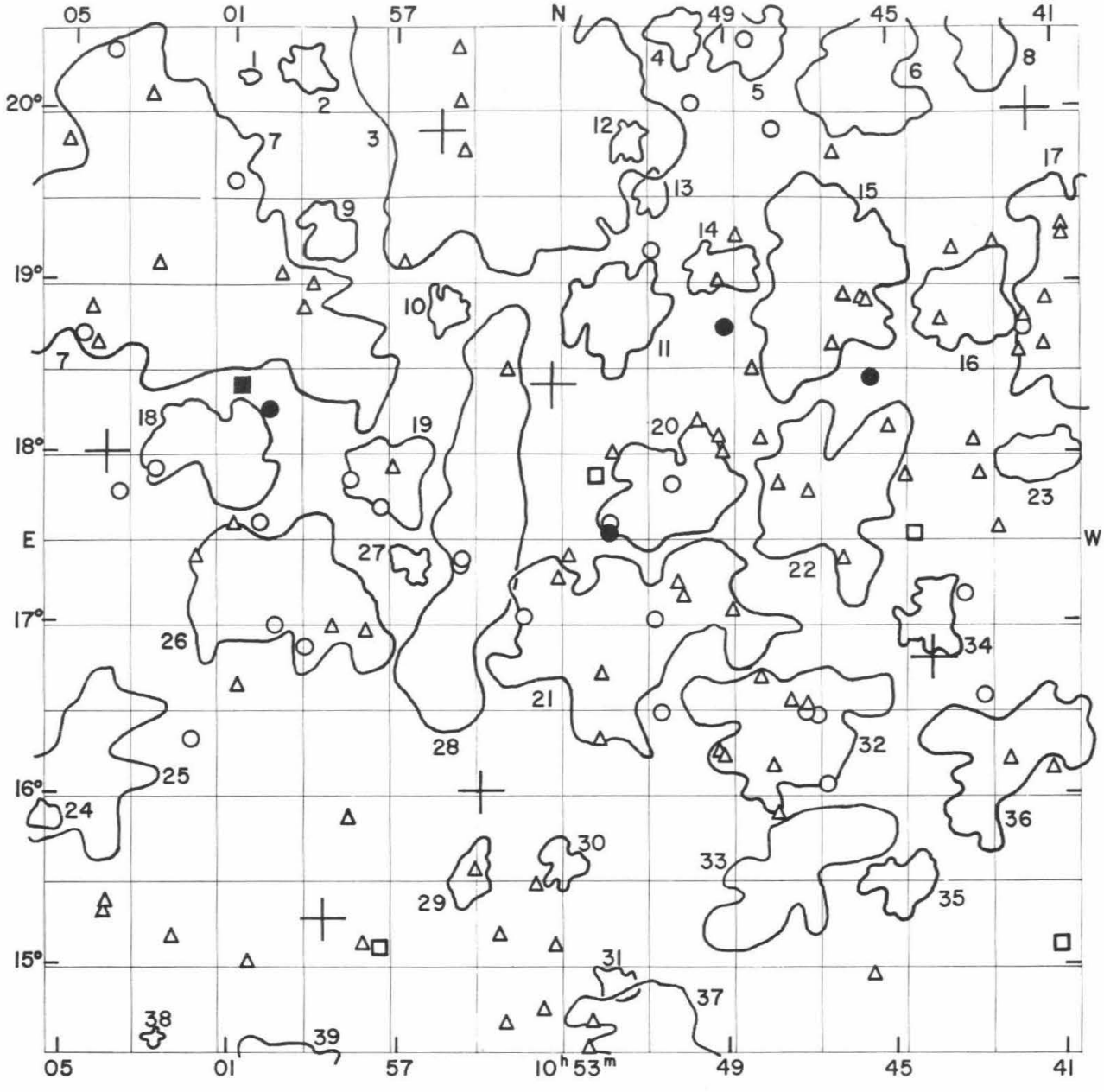
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
10 16.4 +16 21		15.6		
10 16.4 +19 35		15.7		
10 16.7 +16 05		15.7		
10 16.8 +19 38		15.3		
10 18.3 +20 24		15.7		extremely diffuse
10 18.5 +16 33		14.8		
10 18.6 +16 22		15.0		
10 18.6 +19 53	3213	14.3		
10 19.0 +15 10		15.5		
10 19.0 +16 01		15.6		
10 19.2 +17 14		15.6		
10 19.3 +15 57		15.6		compact
10 19.5 +17 03		15.5		
10 19.5 +18 06		15.2		double nebula
10 19.6 +15 09		15.4		double system
10 19.8 +14 42		15.4		double nebula
10 19.9 +16 00		15.7		with double companion 2' s pr.
10 19.9 +20 07	3222	14.5	+5577	
10 20.0 +16 11		15.5		compact
10 20.0 +19 38		15.4		
10 20.1 +15 10		15.3		
10 20.1 +20 02		15.4		double system
10 20.2 +18 36		15.5		
10 20.4 +19 06		15.7		
10 20.5 +18 12		14.6		very compact
10 20.7 +20 08	3226	13.3	+1338	m_H = 12.8 E
10 20.8 +18 22		15.1		
10 20.8 +20 06	3227	12.2	+1111	m_H = 12.2 Sb
10 21.4 +17 18		15.2		
10 21.5 +17 00	607*	14.9		
10 21.7 +16 01		15.4		
10 21.8 +19 09		15.6		
10 21.9 +16 57		15.7		
10 21.9 +20 22		15.5		
10 22.0 +15 00		15.4		extremely diffuse spiral
10 22.0 +16 00		15.3		
10 22.1 +15 14		15.5		double system
10 22.4 +17 25	3239	13.5	+ 880	disrupted irregular nebula
10 22.4 +17 32		15.3		compact
10 22.5 +17 28		15.7		
10 22.5 +18 25		15.6		double system
10 22.6 +17 24		15.2		
10 22.6 +17 30		15.1		compact
10 22.6 +20 15		15.0		
10 22.8 +17 30		15.2		
10 22.9 +17 20		15.4		compact
10 23.0 +15 27		15.4		compact
10 23.2 +14 37		14.2		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	′				
10	23.3	+19	35		15.3		
10	23.3	+20	13		15.6		
10	23.7	+17	46		14.4		
10	23.8	+20	29	611*	14.8		
10	23.9	+15	36		15.5		diffuse spiral
10	23.9	+16	24		15.1		
10	24.1	+17	06		15.5		
10	24.2	+16	23		15.1		
10	24.2	+19	05		15.3		
10	24.4	+16	16		15.2		
10	24.4	+16	20		15.4		compact
10	24.4	+18	23		15.6		
10	24.4	+18	57		15.5		
10	24.6	+16	18		15.1		compact
10	24.6	+16	43		15.6		
10	24.6	+18	20		15.3		
10	24.8	+17	12		15.3		
10	25.1	+17	48		15.3		triple system
10	25.2	+16	25		15.0		
10	25.2	+19	45		15.5		
10	25.4	+17	43		15.4		
10	25.5	+18	52		15.4		
10	26.0	+14	35		15.6		compact
10	26.2	+20	00		15.6		
10	26.4	+20	00		15.6		
10	26.8	+19	52		14.5		
10	27.1	+16	26		15.2		
10	27.1	+20	05		14.8		
10	27.7	+15	27		15.0		
10	28.6	+19	38		15.7		extremely diffuse
10	28.7	+20	00		15.6		
10	28.7	+20	19		15.7		compact
10	28.8	+19	57		15.6		compact
10	29.0	+18	27		15.7		quadruple system
10	29.0	+19	42		15.5		double system
10	29.3	+14	50		15.5		
10	29.9	+20	01		15.3		
10	30.0	+20	11		15.2		
10	30.1	+16	07	616*	14.6		
10	30.8	+16	38		15.7		
10	31.5	+19	57		15.1		
10	31.6	+15	13		15.5		
10	32.2	+18	01		15.7		extremely diffuse
10	32.3	+15	44		15.2		
10	33.1	+20	18		15.5		multiple system
10	33.4	+16	45		15.6		
10	33.5	+16	29		15.4		diffuse spiral
10	34.4	+18	24	3303	14.5		double nebula, tidal effect
10	34.7	+17	18		15.3		
10	34.8	+18	19		15.1		
10	36.6	+15	06		15.2		
10	36.8	+18	05		15.3		
10	37.5	+19	28		15.5		
10	39.0	+15	55	635*	15.2		
10	39.0	+18	36		15.6		
10	39.3	+18	35		15.4		
10	39.4	+18	30		15.1		
10	39.6	+19	22		15.6		
10	39.7	+15	36	637*	15.3		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 39.7	+16 33		15.5		
10 39.8	+16 01		15.7		double nebula
10 39.8	+18 51		15.6		double nebula
10 39.9	+16 00		15.0		
10 40.0	+16 34		15.6		
10 40.4	+15 49		15.7		very compact
10 40.8	+19 16		15.6		
10 40.8	+19 19		15.4		
10 41.0	+15 08	3346	12.8		m_H = 12.4 SBc
10 41.1	+16 09	638*	15.4		
10 41.2	+18 54		15.7		
10 41.3	+18 38		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3222	-	-	13.87	SB0	13.8	SB0	-	-
3226	-	-	12.97	E1	12.6	E1	-	-
3227	-	-	11.71	Sb	11.3	Sb	-	-
3239	-	-	12.86	Irr.	-	Irr.	-	-



FIELD No. 95

10^h53^m $+17^o30'$

Survey Plate No. 463

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
14760	10 41 33.2	+ 20 01 18	6.10
14819	10 44 01.6	+ 16 48 03	7.72
15025	10 53 16.3	+ 18 25 11	7.32
15058	10 54 59.2	+ 16 01 47	7.77
15073	10 55 57.2	+ 19 53 25	6.94
15144	10 58 47.4	+ 15 16 59	7.9
15273	11 04 05.1	+ 18 00 29	6.59

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1039.4 + 1853	open	339	7.2	MD	17
1041.4 + 1759	compact	143	1.8	ED	23
1042.3 + 1614	open	146	4.0	D	36
1042.7 + 2041	medium compact	126	3.6	MD	8
1043.1 + 1854	medium compact	161	2.9	VD	16
1044.1 + 1701	open	151	2.0	VD	34
1044.9 + 1527	compact	229	1.9	VD	35
1045.7 + 2010	open	125	3.3	MD	6
1046.5 + 1859	medium compact	270	5.2	D	15
1046.6 + 1745	medium compact	292	4.3	D	22
1047.5 + 1534	medium compact	99	4.2	MD	33
1047.6 + 1623	medium compact	137	4.5	Near	32
1048.4 + 2025	medium compact	170	2.2	MD	5
1049.0 + 1905	compact	164	1.6	VD	14
1050.1 + 2027	compact	107	1.6	D	4
1050.3 + 1745	medium compact	260	3.6	VD	20
1050.6 + 1431	open	150	4.8	D	37
1050.7 + 1930	compact	66	1.3	ED	13
1051.3 + 1950	compact	109	1.3	ED	12
1051.4 + 1656	compact	345	6.0	MD	21
1051.7 + 1454	compact	129	1.0	ED	31
1051.7 + 1849	medium compact	124	3.0	D	11
1053.0 + 1536	medium compact	62	1.3	ED	30
1054.6 + 2017	medium compact	1134	11.2	MD	3
1055.0 + 1725	open	122	5.7	Near	28
1055.2 + 1530	medium compact	76	1.4	ED	29
1055.8 + 1850	medium compact	56	1.2	ED	10
1056.7 + 1721	medium compact	59	1.1	ED	27
1057.1 + 1752	medium compact	118	2.4	VD	19
1058.6 + 1916	compact	135	1.9	VD	9
1059.2 + 2014	compact	108	1.4	ED	2
1059.8 + 1428	open	97	2.7	D	39
1059.8 + 1710	medium compact	156	5.0	MD	26
1100.6 + 2010	compact	58	0.5	ED	1
1101.4 + 1800	compact	282	3.2	VD	18
1102.8 + 1436	compact	42	0.6	ED	38
1102.9 + 1913	open	564	10.7	MD	7
1104.6 + 1606	medium compact	125	3.8	MD	25
1105.5 + 1551	compact	82	1.0	ED	24

Average number of galaxies per cluster = 182.5

GALAXIES

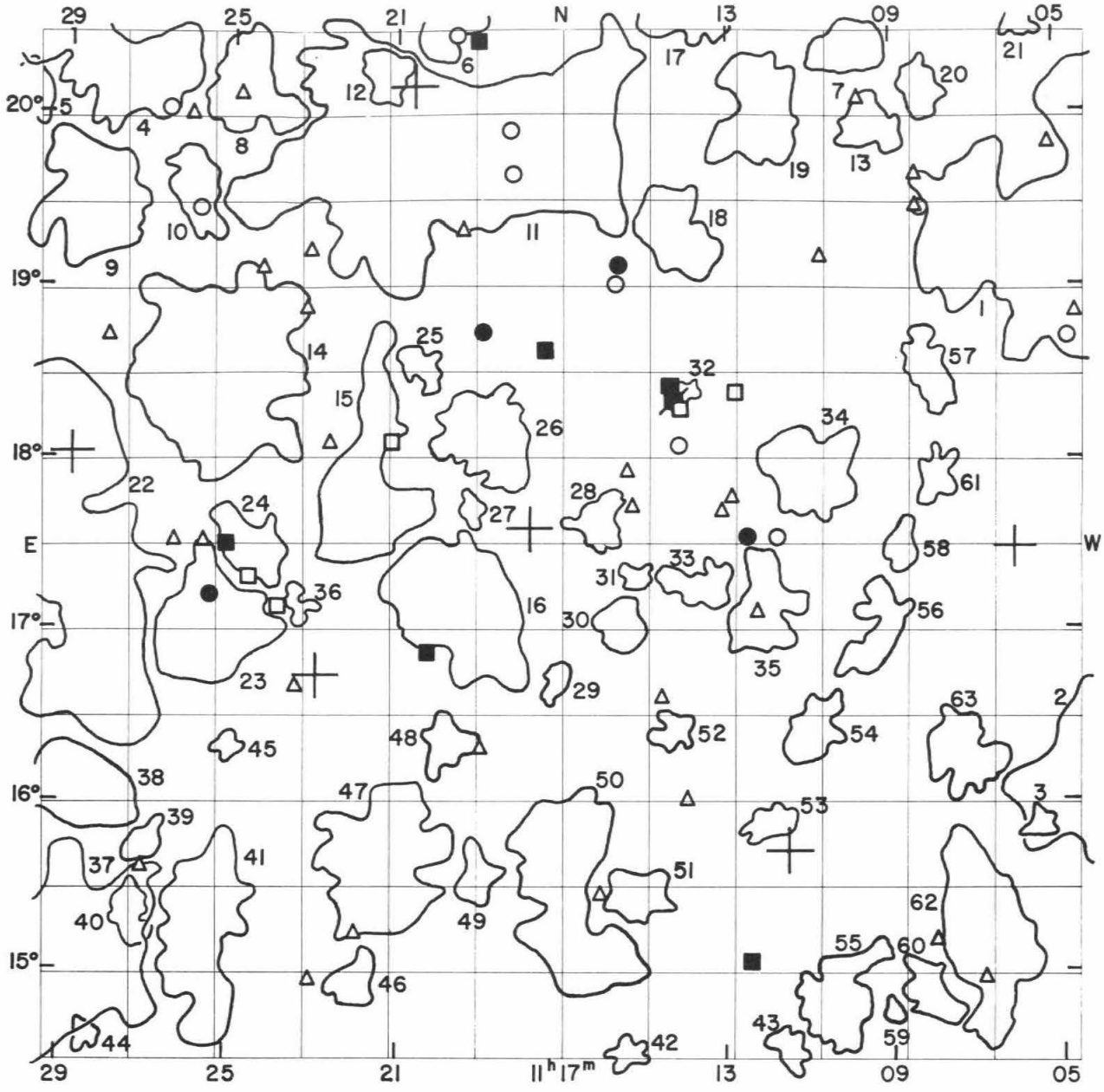
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 40.8	+19 16		15.6		
10 40.8	+19 19		15.4		
10 41.0	+15 08	3346	12.8		m_H = 12.4 SBc
10 41.1	+16 09	638*	15.4		
10 41.2	+18 54		15.7		
10 41.3	+18 38		15.5		
10 41.7	+18 45		14.6		
10 41.7	+18 48		15.6		
10 41.8	+18 36		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
10 42.2 +16 13		15.6		very diffuse
10 42.5 +17 33		15.7		
10 42.5 +19 14		15.5		
10 42.8 +16 35		14.8		
10 42.9 +17 52		15.3		
10 43.0 +18 05		15.7		
10 43.2 +17 11	639*	14.8		
10 43.5 +19 12		15.4		
10 43.8 +18 47		15.5		
10 44.4 +17 32	3370	12.4	+ 1400	m_H = 12.4 S
10 44.7 +17 52		15.5		
10 45.0 +18 10		15.7		
10 45.4 +18 27	642*	14.0		
10 45.5 +14 57		15.5		
10 45.5 +18 53		15.6		
10 45.7 +18 55		15.5		
10 46.1 +18 56		15.7		
10 46.2 +17 23		15.6		
10 46.4 +18 39		15.6		
10 46.4 +19 45		15.4		
10 46.6 +16 04		15.0		
10 46.8 +16 29	3399	14.7		
10 47.0 +17 46		15.7		
10 47.1 +16 30	3405	14.4		double system, common halo
10 47.1 +16 32		15.6		double system
10 47.5 +16 34		15.7		
10 47.7 +17 50		15.1		
10 47.8 +15 54		15.7		
10 47.8 +19 55		15.0		
10 47.9 +16 10		15.4		
10 48.2 +16 42		15.3		
10 48.2 +18 05		15.7		
10 48.4 +18 30		15.4		
10 48.5 +20 26		14.7		
10 48.7 +19 16		15.3		
10 48.9 +17 06		15.7		
10 49.0 +18 44	3426	13.9		
10 49.1 +16 14		15.4		
10 49.1 +18 01		15.6		
10 49.2 +16 16		15.6		very diffuse
10 49.2 +18 06		15.5		
10 49.2 +19 00		15.1		
10 49.7 +18 12		15.2		
10 49.8 +20 03		14.2		
10 50.0 +17 10		15.6		
10 50.2 +17 15		15.7		double system
10 50.3 +17 50	3443	14.7		
10 50.6 +16 30		14.6		
10 50.7 +17 02	3447	14.3		disrupted irregular system
10 50.8 +19 11		14.9		
10 51.8 +17 36	3454	14.1		
10 51.8 +18 01		15.4		triple nebula
10 51.9 +17 33	3455	13.1		m_H = 13.1
10 52.1 +16 20		15.5		
10 52.1 +16 42		15.7		
10 52.1 +17 53	3457	13.0		
10 52.2 +14 41		15.4		
10 52.4 +14 32		15.5		
10 52.8 +17 24		15.2		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 53.1	+15 08		15.1		
10 53.1	+17 16		15.1		
10 53.5	+14 45		15.7		double system
10 53.6	+15 29		15.5		very diffuse
10 53.9	+17 03		14.8		
10 54.3	+18 29		15.3		
10 54.4	+14 40		15.6		double system
10 54.5	+15 11		15.5		
10 55.1	+15 34		15.4		double system, tidal effect
10 55.3	+19 46		15.6		
10 55.4	+17 23	3473	14.8		
10 55.4	+20 04		15.7		
10 55.5	+17 21	3474	14.9		
10 55.5	+20 21		15.6		
10 56.8	+19 06		15.7		
10 57.1	+17 55		15.3		double system, collision
10 57.4	+15 06	3485	12.8		m_H = 12.8 S
10 57.4	+17 42		14.8		
10 57.7	+16 57		15.2		
10 57.8	+15 07		15.5		
10 58.1	+17 51	3487	14.6		double system
10 58.2	+15 52		15.5		
10 58.6	+16 59		15.3		diffuse
10 59.0	+18 59		15.5		very compact
10 59.2	+16 52		14.4		
10 59.3	+18 51		15.7		
10 59.8	+19 02		15.4		double system
10 59.9	+17 00		14.5		
11 00.2	+18 15	3501	13.8		
11 00.3	+17 36		14.9		
11 00.5	+15 01		15.5		
11 00.8	+18 24	3507	11.4		
11 00.9	+16 38		15.6		compact
11 01.0	+17 35		15.4		
11 01.0	+19 35		14.9		
11 01.8	+17 24		15.1		
11 01.9	+16 20		14.2		
11 02.4	+15 09		15.1		
11 02.8	+17 55		14.9		
11 02.8	+19 06		15.5		
11 03.0	+20 04		15.5		
11 03.7	+17 46		15.0		
11 03.9	+15 21	667*	15.5		double system
11 04.0	+15 19	668*	15.4		
11 04.0	+20 20	3522	14.2		
11 04.3	+18 38		15.4		
11 04.6	+18 50		15.1		diffuse
11 04.7	+18 42		14.7		double system, tidal effect
11 05.1	+19 49		15.5		extremely diffuse

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3370	-	-	-	-	-	Sc	-	-



FIELD No. 96

$11^h17^m \quad +17^\circ30'$

Survey Plate No. 51

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
15317	11 06 02.3	+ 17 28 27	6.86
15441	11 11 37.1	+ 15 42 11	3.41
15585	11 17 49.0	+ 17 35 06	6.87
15637	11 20 39.6	+ 20 10 22	9.7
15677	11 23 00.0	+ 16 43 54	5.63
15804	11 28 55.3	+ 18 01 34	6.99

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1102.9 + 1913	open	564	10.7	MD	1
1104.6 + 1606	medium compact	125	3.8	MD	2
1105.5 + 1551	compact	82	1.0	ED	3
1105.9 + 2034	medium compact	73	1.2	VD	21
1106.8 + 1513	open	158	4.0	MD	62
1107.4 + 1616	medium compact	120	2.3	VD	63
1108.0 + 1753	open	93	1.4	VD	61
1108.1 + 1830	medium compact	122	1.7	VD	57
1108.3 + 1452	compact	87	1.6	VD	60
1108.3 + 2008	medium compact	107	1.6	ED	20
1108.8 + 1728	compact	98	1.3	ED	58
1109.1 + 1445	compact	64	0.5	ED	59
1109.2 + 1659	open	102	2.0	VD	56
1109.5 + 1956	medium compact	139	1.7	VD	13
1110.0 + 2023	compact	160	1.9	VD	7
1110.5 + 1448	medium compact	121	2.5	D	55
1111.0 + 1624	medium compact	104	2.0	VD	54
1111.0 + 1755	compact	297	2.7	VD	34
1111.6 + 1434	medium compact	51	1.3	D	43
1112.0 + 1552	medium compact	75	1.4	ED	53
1112.1 + 1706	compact	272	2.4	VD	35
1112.2 + 2000	open	201	2.8	VD	19
1113.8 + 1715	medium compact	102	1.6	D	33
1114.0 + 2102	open	295	4.7	D	17
1114.1 + 1824	medium compact	54	0.8	ED	32
1114.3 + 1919	open	128	2.4	D	18
1114.4 + 1624	open	82	1.3	VD	52
1115.2 + 1527	medium compact	80	1.8	VD	51
1115.3 + 1717	medium compact	64	0.9	ED	31
1115.5 + 1431	medium compact	58	1.1	VD	42
1115.7 + 1701	compact	134	1.5	VD	30
1116.1 + 1736	medium compact	105	1.6	ED	28
1117.0 + 1525	medium compact	233	4.3	D	50
1117.1 + 1641	compact	70	1.0	ED	29
1118.9 + 1807	compact	291	2.8	VD	26
1119.0 + 1534	medium compact	90	1.7	ED	49
1119.2 + 1740	compact	65	1.0	VD	27
1119.5 + 1707	medium compact	320	4.0	D	16
1119.8 + 2031	medium compact	117	2.1	VD	6
1119.9 + 1620	open	87	1.8	VD	48
1120.2 + 1948	compact	933	8.6	MD	11
1120.4 + 1831	compact	110	1.3	VD	25
1121.3 + 2014	medium compact	126	1.6	VD	12
1121.4 + 1537	open	234	3.9	D	47
1121.7 + 1748	medium compact	348	3.8	VD	15
1122.0 + 1456	medium compact	126	1.5	VD	46
1123.4 + 1707	medium compact	73	0.9	ED	36
1124.5 + 1728	medium compact	140	2.0	MD	24
1124.7 + 2010	medium compact	195	2.5	VD	8
1125.1 + 1619	compact	60	0.8	ED	45
1125.3 + 1830	open	248	5.9	MD	14
1125.5 + 1700	medium compact	274	3.7	D	23
1125.8 + 1511	medium compact	232	3.6	D	41
1125.9 + 1934	medium compact	132	2.1	VD	10
1127.1 + 1545	medium compact	98	1.3	VD	39
1127.4 + 1519	medium compact	133	1.5	ED	40
1128.0 + 2015	medium compact	568	4.1	D	4

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1128.4 + 1436	medium compact	67	0.9	ED	44
1128.5 + 1930	medium compact	215	3.4	D	9
1128.6 + 1604	open	102	2.8	D	38
1129.4 + 1501	medium compact	337	6.4	MD	37
1129.9 + 2008	medium compact	117	1.6	VD	5
1130.5 + 1740	open	769	10.1	MD	22

Average number of galaxies per cluster = 178.2

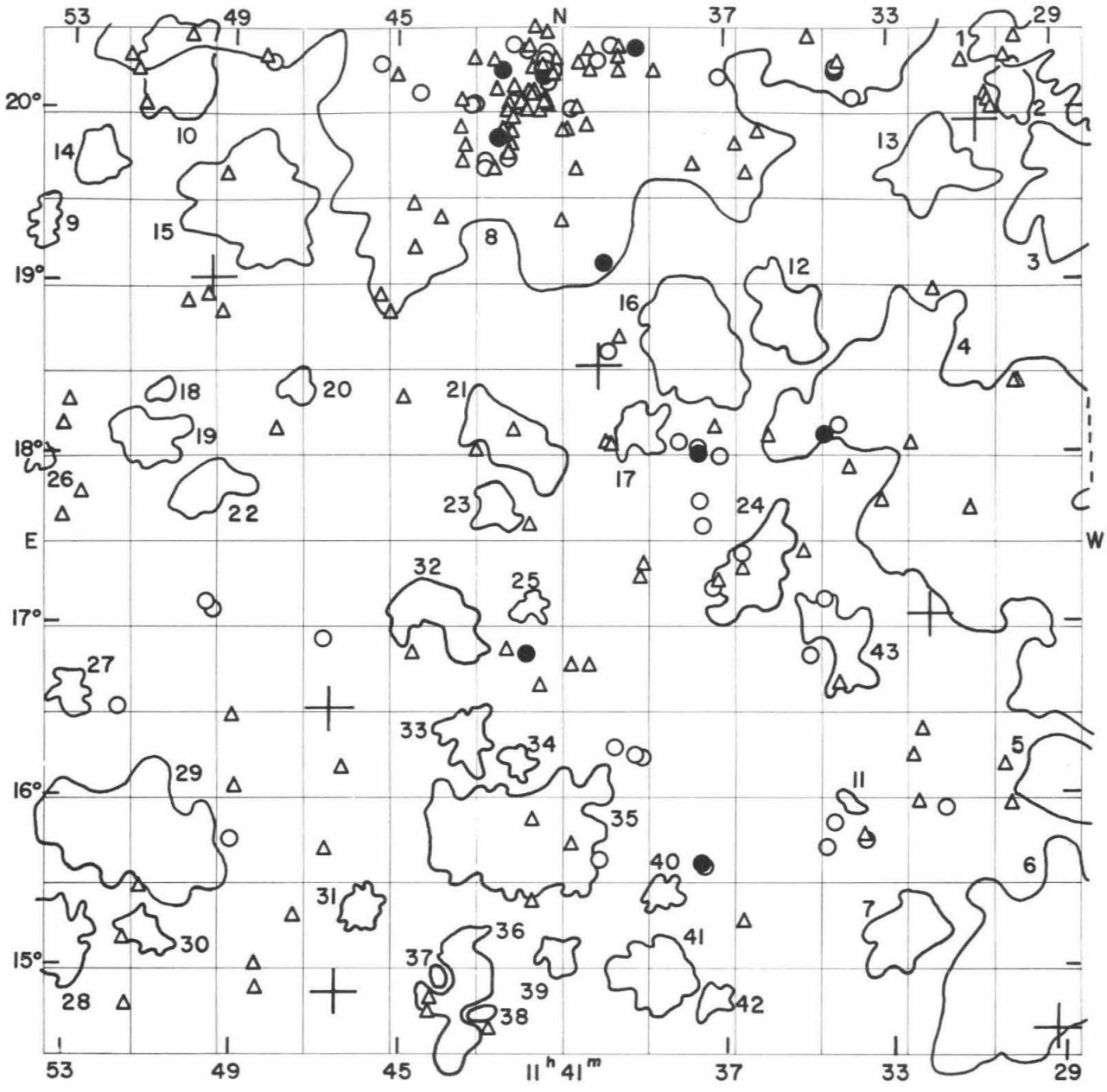
GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
11 04.6 +18 50		15.1		diffuse
11 04.7 +18 42		14.7		double system, tidal effects
11 05.1 +19 49		15.5		extremely diffuse
11 06.9 +14 57		15.7		
11 08.0 +15 10		15.6		
11 08.3 +19 27		14.9		
11 08.4 +19 28		15.6		
11 08.4 +19 39		15.7		extremely compact
11 09.9 +20 05		15.6		extremely compact
11 10.8 +19 10		15.6		double system
11 11.8 +17 32	3592	14.8		
11 12.3 +17 06		15.6		double system
11 12.5 +15 03	3596	11.7		m_H = 12.2 Sc
11 12.6 +17 32	3598	13.5		
11 12.8 +18 23	3599	13.0		
11 12.9 +17 46		15.7		
11 13.2 +17 41	3602	15.7		
11 14.0 +16 00		15.5		
11 14.1 +18 17	3605	12.7	+ 693	m_H = 13.1
11 14.2 +18 04		14.3		
11 14.3 +18 19	3607	10.2	+ 911	m_H = 11.4 Ep
11 14.4 +18 25	3608	11.7	+1210	m_H = 12.5 E
11 14.6 +16 36		15.7		very diffuse
11 15.3 +17 43		15.2		compact
11 15.4 +17 56	2703*	15.7		very diffuse
11 15.6 +19 07		13.6		
11 15.7 +19 00		14.9		
11 16.1 +15 27		15.6		very diffuse
11 17.5 +18 38	3626	11.2	+1452	m_H = 11.8 Sa
11 18.2 +19 38		14.8		
11 18.3 +19 54		14.6		
11 18.9 +18 44		14.0		
11 19.0 +16 18		15.3		
11 19.0 +20 26	3646	11.5	+4425	m_H = 11.8 S
11 19.4 +19 19		15.5		
11 19.6 +20 28	3649	14.7		
11 20.3 +16 52	3655	11.6		m_H = 12.3 Sc
11 21.1 +18 05	3659	12.7		m_H = 12.9 S
11 22.0 +15 13		15.5		
11 22.6 +18 05		15.4		
11 23.1 +14 57	2810*	15.4		
11 23.1 +19 12		15.3		
11 23.2 +18 52		15.6		
11 23.5 +16 40		15.7		

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
11 23.8	+17 08	3681	12.2	+1314	m_H = 12.8 Sb
11 24.3	+19 06		15.2		
11 24.6	+17 18	3684	12.1	+1422	m_H = 12.6 Sb
11 24.8	+20 07		15.4		compact
11 25.1	+17 30	3686	11.6	+1022	m_H = 12.3 SBc
11 25.5	+17 12	3691	13.1		m_H = 13.1
11 25.7	+17 31		15.6		
11 25.8	+19 27		14.9		
11 26.0	+20 00		15.5		
11 26.4	+17 31		15.3		
11 26.5	+20 02		14.9		
11 27.2	+15 36		15.3		
11 28.0	+18 42		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3596	11.8	Sc	-	-	-	-	-	-
3605	13.0	-	13.95	E4	14.0	E4	-	-
3607	11.0	E	10.97	S0	11.0	S0	-	-
3608	11.8	E	12.18	E1	12.1	E1	-	-
3626	11.8	Sa	11.23	Sa	11.0	Sa	-	-
3646	-	-	11.84	Sc	11.8	Sc	11.82	Sc-
3681	-	-	12.44	Sb	12.5	Sb	-	-
3684	-	-	12.33	Sc	12.3	Sc	-	-
3686	-	-	11.99	Sb	11.7	Sb	-	-



FIELD No. 97

11^h41^m $+17^o30'$

Survey Plate No. 1406

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
15811	11 29 10.1	+ 14 38 35	6.15
15850	11 30 52.9	+ 19 57 22	7.22
15874	11 32 06.4	+ 17 04 24	6.05
16078	11 40 08.5	+ 18 31 10	7.26
16189	11 46 30.6	+ 14 51 06	2.23
16192	11 46 40.0	+ 16 31 17	5.95
16243	11 49 33.5	+ 19 02 15	7.9

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1128.0 + 2015	medium compact	568	4.1	D	1
1128.5 + 1930	medium compact	215	3.4	D	3
1128.6 + 1604	open	102	2.8	D	5
1129.4 + 1501	medium compact	337	6.4	MD	6
1129.9 + 2008	medium compact	117	1.6	VD	2
1130.5 + 1740	open	769	10.1	MD	4
1132.0 + 1940	open	213	2.5	VD	13
1132.8 + 1510	medium compact	109	2.3	VD	7
1134.0 + 1557	compact	55	0.7	ED	11
1134.3 + 1654	medium compact	89	2.3	MD	43
1135.5 + 1848	compact	153	2.4	VD	12
1136.3 + 1718	medium compact	121	2.5	MD	24
1137.4 + 1448	medium compact	60	1.1	ED	42
1137.8 + 1838	medium compact	269	3.5	MD	16
1138.6 + 1526	medium compact	84	1.2	ED	40
1138.7 + 1457	medium compact	103	2.3	D	41
1139.0 + 1809	medium compact	77	1.6	VD	17
1141.1 + 1504	open	64	1.3	ED	39
1141.7 + 1706	compact	59	0.9	ED	25
1142.1 + 1545	medium compact	352	4.4	MD	35
1142.1 + 1612	medium compact	63	0.9	ED	34
1142.1 + 1805	open	148	2.5	VD	21
1142.1 + 2126	medium compact	1895	23.8	Near	8
1142.6 + 1741	compact	65	1.4	VD	23
1143.0 + 1444	medium compact	39	0.5	ED	38
1143.3 + 1621	medium compact	75	1.6	VD	33
1143.4 + 1451	medium compact	137	2.8	D	36
1144.0 + 1456	medium compact	45	0.5	ED	37
1144.0 + 1702	open	113	2.4	VD	32
1145.8 + 1519	medium compact	88	1.2	VD	31
1147.4 + 1825	medium compact	79	1.1	ED	20
1148.6 + 1928	open	271	3.7	D	15
1149.6 + 1746	medium compact	97	2.0	ED	22
1150.4 + 2015	open	140	2.6	VD	10
1150.7 + 1821	compact	56	0.7	ED	18
1151.0 + 1510	medium compact	74	1.4	VD	30
1151.0 + 1805	open	110	2.0	VD	19
1151.2 + 1545	medium compact	409	4.3	D	29
1152.5 + 1941	open	65	1.6	VD	14
1152.9 + 1634	medium compact	117	1.2	VD	27
1153.7 + 1756	compact	57	0.9	ED	26
1153.7 + 1919	compact	95	1.4	ED	9
1154.5 + 1503	medium compact	279	3.7	VD	28

Average number of galaxies per cluster = 196.1

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
11 29.9	+ 18 25		15.5		
11 29.9	+ 20 25		15.4		
11 30.0	+ 18 25		15.5		
11 30.2	+ 15 57		15.7		compact
11 30.2	+ 20 18		15.5		

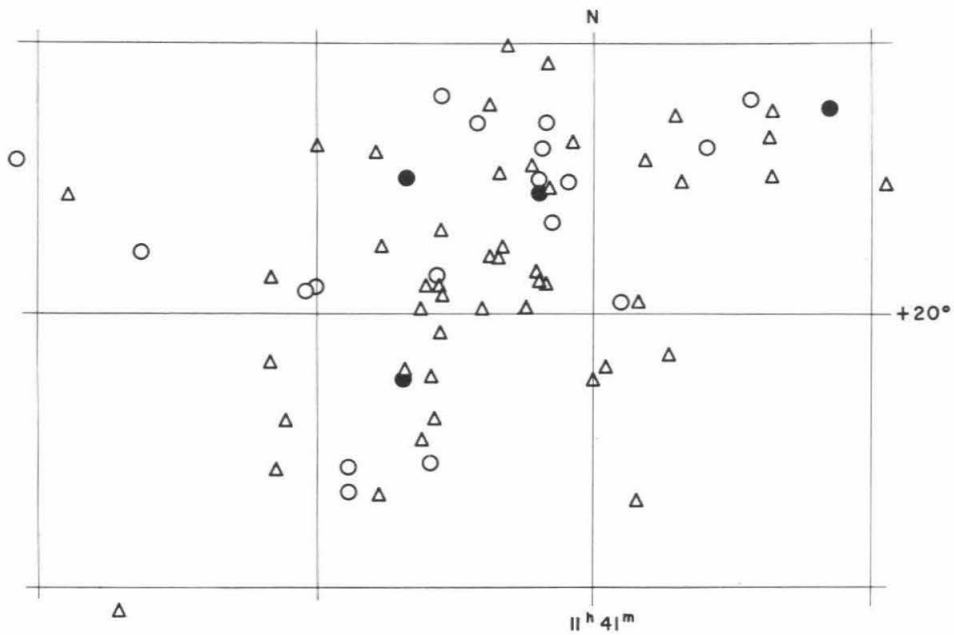
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 30.4 +16 10		15.7		
11 30.5 +20 00		15.5		
11 30.6 +20 04		15.7		
11 30.6 +20 05		15.6		
11 31.1 +17 40		15.5		
11 31.3 +20 17		15.6		diffuse
11 31.8 +15 56		14.6		
11 32.0 +18 57		15.6		
11 32.4 +15 57		15.3		diffuse
11 32.4 +16 23		15.6		
11 32.5 +16 14		15.7		
11 32.5 +18 03		15.7		
11 33.2 +17 43		15.7		
11 33.7 +15 45		15.0		
11 33.8 +15 47		15.5		
11 33.8 +20 05		14.6		
11 34.1 +17 55		15.2		
11 34.2 +20 17		15.3		
11 34.3 +16 40		15.6		
11 34.3 +18 10	3764	14.9		double nebula
11 34.3 +20 14		13.9		
11 34.3 +20 16		14.6		
11 34.5 +15 51		14.5		
11 34.6 +15 42		14.9		
11 34.6 +18 07	3768	13.7		
11 34.7 +17 09	3767	14.5		
11 35.0 +16 50		14.8		
11 35.0 +20 27		15.6		
11 35.2 +17 26		15.6		
11 36.0 +18 06		15.2		compact
11 36.2 +19 52		15.7		diffuse
11 36.5 +19 38		15.6		compact
11 36.6 +15 16		15.6		
11 36.6 +17 19		15.7		
11 36.6 +17 25		14.8		
11 36.8 +19 48		15.5		
11 37.2 +17 15		15.7		
11 37.2 +17 59	3790	14.5		
11 37.2 +20 12		14.2		
11 37.3 +17 14		14.6		compact
11 37.3 +18 09		15.7		
11 37.6 +15 36	3799	14.4		connected with 3800
11 37.6 +17 35		14.3		
11 37.7 +15 37	3800	13.1		connected with 3799
11 37.7 +17 44		14.6		
11 37.7 +18 00	3801	13.3		
11 37.7 +18 03	3802	14.7		
11 37.9 +19 41		15.7		
11 38.2 +18 04	3806≡3807	14.6		
11 38.7 +20 14		15.3		
11 39.0 +16 15		14.6		
11 39.0 +17 21		15.2		
11 39.1 +17 17		15.3		
11 39.2 +16 15		14.5		
11 39.2 +20 23	3816	13.6		
11 39.6 +18 41		15.5		very compact
11 39.6 +20 15		15.5		
11 39.6 +20 19		15.7		
11 39.6 +20 22		15.6		

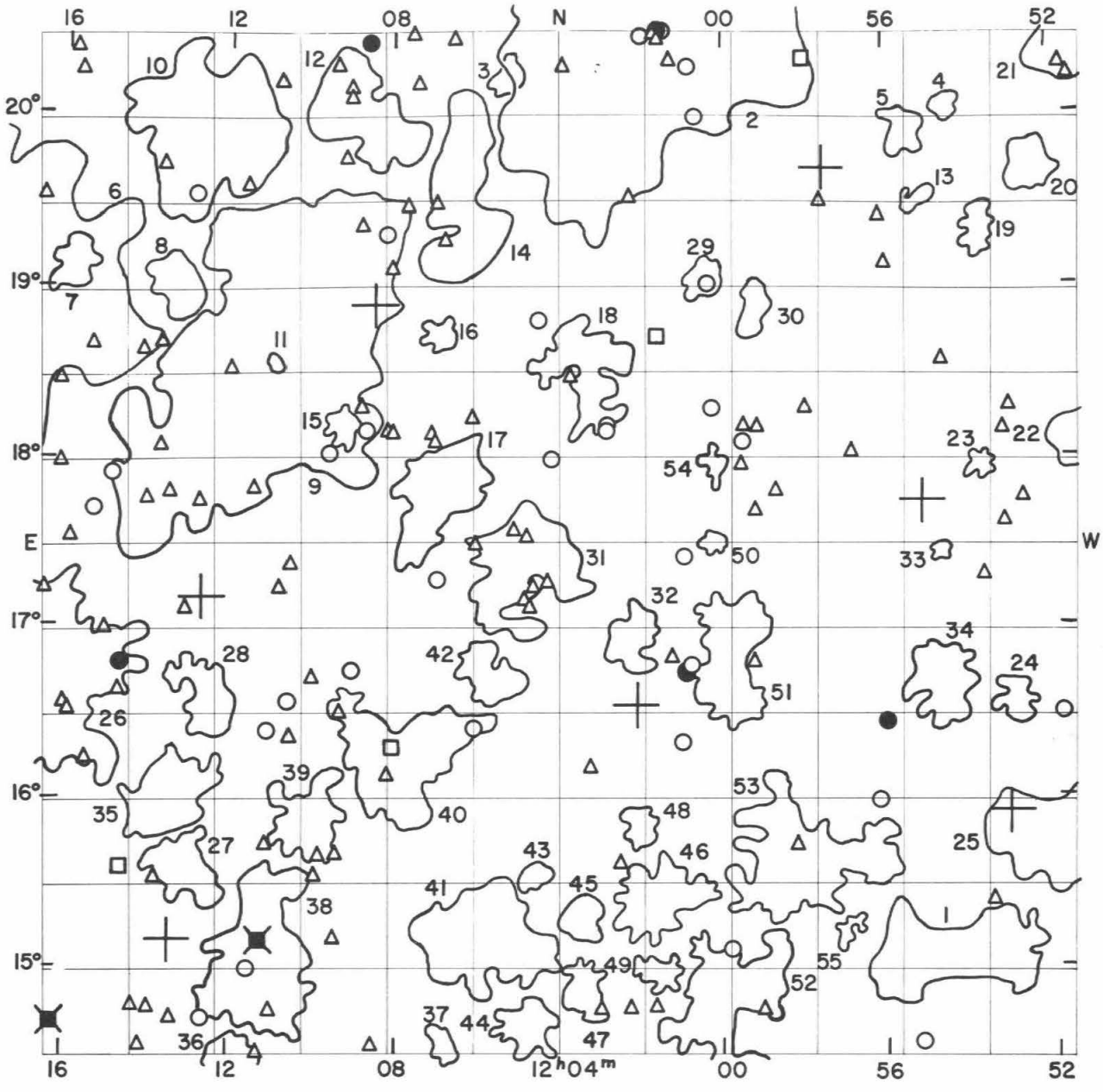
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 39.7 +16 18		14.3		
11 39.8 +18 02		15.7		
11 39.8 +18 36		14.3		
11 39.8 +20 24		14.7		
11 39.9 +18 04		15.6		
11 40.0 +19 07	3827	13.6		
11 40.1 +15 38		15.0		
11 40.1 +20 18		15.0		
11 40.3 +20 14		15.6		
11 40.3 +20 21		15.4		
11 40.4 +16 46		15.6		
11 40.4 +19 55		15.5		
11 40.6 +19 39		15.5		compact
11 40.6 +20 01		15.2		
11 40.6 +20 17		15.7		double nebula
11 40.8 +15 43		15.7		
11 40.8 +16 46		15.1		
11 40.8 +20 01	2951*	15.0		
11 40.9 +19 54		15.2		
11 41.0 +19 22	3834	15.1		
11 41.0 +19 53		15.7		
11 41.1 +20 18		15.7		
11 41.2 +20 15		14.3		
11 41.3 +20 03		15.2		
11 41.3 +20 10	3837	14.2		
11 41.3 +20 13		15.3		double system
11 41.3 +20 21	3840	14.7		
11 41.3 +20 28		15.5		double nebula
11 41.4 +20 03		15.5		diffuse
11 41.4 +20 05		15.7		
11 41.4 +20 13	3842	13.3		
11 41.4 +20 15	3841	15.0		
11 41.4 +20 18	3844	14.9		
11 41.5 +16 39		15.2		
11 41.5 +20 00		15.7		
11 41.5 +20 16	3845	15.1		
11 41.6 +20 07		15.3		
11 41.6 +20 30		15.1		double system
11 41.7 +15 23		15.5		very diffuse
11 41.7 +15 52		15.6		compact
11 41.7 +20 06		15.4		
11 41.7 +20 15	3851	15.2		
11 41.8 +16 50	3853	13.5		
11 41.8 +17 35		15.5		
11 41.8 +20 00		15.5		compact
11 41.8 +20 06		15.5		
11 41.8 +20 22		15.5		double system
11 41.9 +20 20		14.9		
11 42.1 +20 02		15.6		
11 42.1 +20 03		15.4		
11 42.1 +20 09		15.5		
11 42.2 +18 09		15.5		
11 42.2 +19 49	3857	15.1		
11 42.2 +19 53		15.7		
11 42.2 +19 58		15.7		
11 42.2 +20 05	3860	14.5		double system
11 42.2 +20 24		14.6		
11 42.3 +19 44	3859	14.9		
11 42.3 +19 46		15.7		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
11	42.3	+20 00		15.3		double system
11	42.3	+20 03		15.6		
11	42.4	+16 51		15.7		
11	42.5	+19 53	3862	14.0		
11	42.5	+19 54	2955*	15.2		
11	42.5	+20 15	3861	14.0		double system
11	42.6	+19 40	3864	15.5		diffuse
11	42.6	+20 07		15.1		
11	42.7	+14 39		15.7		
11	42.7	+20 18		15.7		double system
11	42.8	+19 40	3867	14.6		
11	42.8	+19 43	3868	14.8		
11	43.1	+18 01		15.4		compact
11	43.1	+20 03	3873	14.2		
11	43.1	+20 18		15.5		diffuse
11	43.2	+20 02	3875	14.8		
11	43.3	+19 48		15.4		
11	43.4	+19 43		15.6		diffuse
11	43.5	+19 55		15.7		
11	43.5	+20 04		15.3		double system
11	44.0	+19 23		15.3		
11	44.2	+14 45		15.5		triple system
11	44.2	+14 49		15.3		
11	44.5	+20 07	3886	14.3		
11	44.6	+19 12		15.5		
11	44.6	+19 27		15.6		very diffuse
11	44.7	+16 50		15.6		
11	44.8	+18 20		15.6		
11	45.0	+20 13		15.5		
11	45.2	+18 50		15.6		diffuse double system
11	45.4	+18 55		15.7		
11	45.4	+20 17		15.0		
11	46.3	+16 10		15.5		
11	46.8	+15 41		15.1		
11	46.8	+16 55		14.7		
11	47.4	+15 18		15.4		
11	47.9	+18 08		15.6		
11	48.0	+20 17	3919	14.5		
11	48.2	+20 19		15.7		
11	48.3	+14 53		15.4		
11	48.4	+15 01		15.7		
11	48.9	+16 03		15.3		
11	49.0	+15 45		14.9		
11	49.0	+16 28		15.2		compact
11	49.2	+19 38		15.7		
11	49.3	+18 49		15.7		
11	49.4	+17 05	3933	14.2		
11	49.6	+17 08	3934	15.0		
11	49.6	+18 56		15.7		diffuse
11	50.0	+20 25		15.7		double nebula
11	50.1	+18 54		15.7		extremely diffuse
11	51.1	+15 27		15.5		
11	51.2	+20 01		15.5		
11	51.5	+14 46		15.6		
11	51.5	+20 14		15.6		
11	51.6	+15 10		15.7		diffuse
11	51.7	+20 18		15.6		
11	51.8	+16 31		14.9		
11	52.7	+17 46		15.4		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 53.1 +18 18		15.5		compact
11 53.2 +17 37		15.7		very compact
11 53.2 +18 10		15.5		

Enlargement of area around $11^h41^m + 20^o$





FIELD No. 98

12^h04^m $+17^o30'$

Survey Plate No. 89

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
16311	11 53 06.3	+ 15 55 30	5.49
16358	11 55 08.6	+ 17 44 46	6.91
16410	11 57 31.2	+ 19 41 53	7.06
16494	12 02 08.9	+ 16 32 52	7.5
16639	12 08 29.5	+ 18 54 12	7.7
16732	12 12 41.1	+ 17 11 06	6.85
16747	12 13 27.9	+ 15 10 38	5.08

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1142.1 + 2126	medium compact	1895	23.8	Near	21
1151.0 + 1805	open	110	2.0	VD	22
1151.2 + 1545	medium compact	409	4.3	D	25
1152.5 + 1941	open	65	1.6	VD	20
1152.9 + 1634	medium compact	117	1.2	VD	24
1153.7 + 1756	compact	57	0.9	ED	23
1153.7 + 1919	compact	95	1.4	ED	19
1154.5 + 1503	medium compact	279	3.7	VD	1
1154.5 + 2001	medium compact	67	0.7	ED	4
1154.6 + 1640	medium compact	221	2.3	ED	34
1154.7 + 1726	compact	56	0.5	ED	33
1155.2 + 1929	medium compact	63	0.8	ED	13
1155.5 + 1953	medium compact	85	1.4	ED	5
1157.0 + 1512	medium compact	53	0.8	VD	55
1158.1 + 1537	medium compact	253	3.8	MD	53
1159.2 + 1850	medium compact	133	1.2	ED	30
1159.9 + 1449	medium compact	342	3.5	D	52
1159.9 + 1650	open	178	2.9	D	51
1200.2 + 1757	compact	61	0.8	ED	54
1200.3 + 1729	compact	57	0.6	ED	50
1200.4 + 1901	medium compact	107	1.1	ED	29
1201.5 + 1457	medium compact	111	1.3	VD	49
1201.5 + 1525	medium compact	161	2.3	D	46
1202.0 + 1550	compact	90	1.3	ED	48
1202.0 + 2028	open	555	9.7	Near	2
1202.2 + 1655	medium compact	124	1.6	VD	32
1203.1 + 1831	open	172	2.8	VD	18
1203.4 + 1451	compact	129	1.5	VD	47
1203.4 + 1517	medium compact	104	1.4	ED	45
1204.5 + 1531	medium compact	53	0.9	ED	43
1204.7 + 1439	medium compact	94	1.7	D	44
1204.8 + 1720	medium compact	224	3.4	VD	31
1205.2 + 2011	medium compact	54	1.0	ED	3
1205.7 + 1510	medium compact	328	3.6	MD	41
1205.8 + 1642	open	131	2.0	VD	42
1206.4 + 1928	medium compact	240	3.3	VD	14
1206.8 + 1434	open	59	1.0	VD	37
1206.9 + 1746	medium compact	252	2.9	VD	17
1206.9 + 1842	medium compact	64	1.0	ED	16
1207.8 + 1611	medium compact	363	3.6	D	40
1208.8 + 1958	open	255	3.1	D	12
1209.2 + 1810	medium compact	89	1.1	ED	15
1210.0 + 1550	open	174	2.2	VD	39
1210.9 + 1831	compact	42	0.5	ED	11
1211.0 + 1830	medium compact	1420	8.8	D	9
1211.1 + 1501	compact	433	3.8	MD	38
1211.9 + 1426	medium compact	102	1.9	D	36
1212.4 + 1635	open	119	1.7	VD	28
1212.5 + 1954	open	408	4.6	MD	10
1213.0 + 1535	medium compact	173	2.0	VD	27
1213.3 + 1900	medium compact	151	1.7	VD	8
1213.4 + 1600	open	148	2.5	D	35
1215.8 + 1907	medium compact	105	1.4	VD	7
1217.0 + 1646	medium compact	546	6.4	D	26
1217.2 + 1906	medium compact	698	7.6	MD	6

Average number of galaxies per cluster = 234.1

GALAXIES

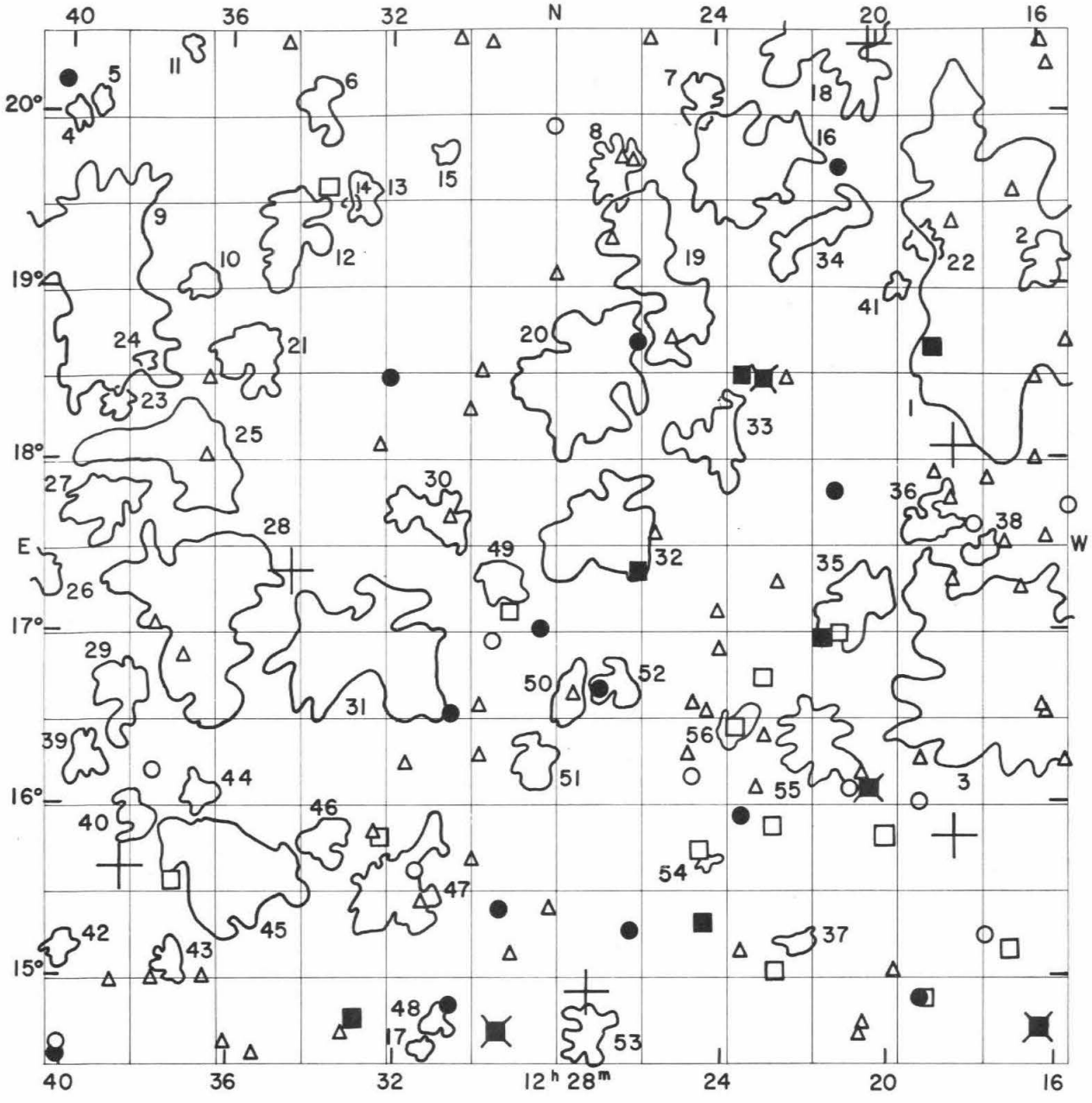
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 51.5 +20 14		15.6		
11 51.7 +20 18		15.6		
11 51.8 +16 31		14.9		
11 52.7 +17 46		15.4		
11 53.1 +18 18		15.5		compact
11 53.2 +17 37		15.7		very compact
11 53.2 +18 10		15.5		
11 53.6 +15 24		15.2		very diffuse
11 53.7 +17 18		15.3		
11 54.7 +18 35		15.7		diffuse
11 55.2 +14 35	3996	14.4		
11 56.0 +16 27	4014	13.5		
11 56.0 +19 08		15.1		
11 56.1 +19 25		15.7		
11 56.2 +16 00		15.0		
11 56.9 +18 02		15.3		
11 57.6 +19 30		15.7		
11 58.0 +18 18		15.7		diffuse
11 58.0 +20 21	4032	12.7		
11 58.3 +15 44		15.7		very diffuse
11 58.8 +17 49		15.5		
11 59.1 +14 45		15.7		
11 59.2 +18 10		15.1		
11 59.3 +16 48		15.1		
11 59.3 +17 42		15.7		very diffuse
11 59.5 +18 11		15.6		
11 59.6 +17 58		15.7		
11 59.6 +18 06	4040	15.0		
11 59.8 +15 07		14.7		
12 00.3 +18 17	4048	14.4		quadruple system, faint bridges
12 00.4 +19 02	4049	14.2		
12 00.6 +20 00	4053	14.6		
12 00.8 +16 47		14.6		
12 00.8 +20 18		14.8		
12 00.9 +16 46		14.0		
12 01.0 +17 25		14.9		
12 01.1 +16 20		14.7		
12 01.3 +16 50		15.6		diffuse
12 01.3 +20 19		15.7		
12 01.5 +20 30	4061	14.4		compact
12 01.6 +20 27		15.7		
12 01.6 +20 30	4065	14.0		very compact
12 01.7 +14 46		15.4		
12 01.7 +18 43	4064	12.5	+1033	m_H = 12.8 S
12 01.7 +20 29	4072	15.6		
12 02.0 +20 28	4076	14.3		
12 02.3 +14 46		15.3		
12 02.3 +19 31		15.2		
12 02.5 +15 37		15.6		
12 02.8 +18 09		14.1		
12 02.8 +18 12		14.6		
12 03.0 +14 46		15.5		
12 03.3 +16 11		15.4		
12 03.8 +18 29		15.6		
12 03.9 +20 17		15.7		
12 04.2 +17 59		14.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 04.3 +17 16		15.7		
12 04.5 +18 48	4110	14.7		
12 04.6 +17 16		14.9		
12 04.7 +17 15		15.6		double nebula
12 04.8 +17 07		15.4		
12 04.8 +17 32		15.5		
12 04.9 +17 10		15.5		
12 05.1 +17 35		15.5		
12 06.1 +16 25	4126	14.6		
12 06.1 +17 29		15.4		
12 06.1 +18 14		15.7		diffuse
12 06.6 +20 26		15.7		
12 06.8 +19 16		15.5		
12 07.0 +17 17		14.8		
12 07.0 +18 05		15.5		
12 07.0 +19 29		15.7		
12 07.1 +18 08		15.7		
12 07.4 +20 11		15.6		
12 07.6 +20 29		15.7		diffuse
12 07.7 +19 28		15.5		
12 08.1 +16 18	4152	12.5		m_H = 12.7 S
12 08.1 +18 09		15.2		extremely compact
12 08.1 +19 06		15.2		
12 08.2 +16 09		15.7		diffuse
12 08.2 +18 10		15.2		
12 08.2 +19 19	4155	14.7		
12 08.6 +14 33	3032*	15.3		
12 08.6 +20 27	4158	13.1		m_H = 12.9
12 08.7 +18 10		14.7		
12 08.8 +18 18		15.6		
12 08.8 +19 22		15.3		
12 09.0 +20 10		15.7		very compact
12 09.1 +16 46		14.8		
12 09.1 +20 07		15.7		
12 09.2 +19 46		15.6		double nebula
12 09.4 +16 30		15.2		
12 09.4 +20 18		15.3		
12 09.5 +15 11		15.7		very diffuse
12 09.5 +15 41		15.2		
12 09.6 +18 02	4166	14.3		
12 09.9 +15 40		15.4		
12 10.0 +15 33		15.2		
12 10.0 +16 42		15.7		diffuse
12 10.5 +17 22		15.4		
12 10.6 +16 22		15.5		compact
12 10.6 +16 34		14.8		
12 10.8 +17 14		15.7		
12 10.8 +20 12		15.6		
12 11.0 +14 46	3049*	15.7		double nebula
12 11.1 +15 44		15.5		
12 11.1 +16 24		14.8		multiple system, intergalactic
12 11.2 +15 10	4192	11.0	- 124	m_H = 11.4 Sb matter
12 11.3 +14 30	3053*	15.7		
12 11.5 +17 49		15.4		
12 11.6 +15 00		14.9		
12 11.6 +19 36		15.6		
12 12.0 +18 31		15.3		double nebula
12 12.6 +14 43	3065*=3077*	14.7		
12 12.8 +17 45		15.7		

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
12 12.8	+19 34		14.9		
12 13.1	+17 06		15.5		
12 13.4	+14 42		15.4		very diffuse
12 13.5	+17 48	4186	15.7		
12 13.6	+19 43		15.7		
12 13.7	+18 05		15.4		
12 13.7	+18 41		15.7		diffuse
12 13.8	+15 32		15.3		
12 13.9	+14 46		15.1		very compact
12 14.0	+17 45		15.4		double system
12 14.1	+14 33	3093*	15.4		
12 14.1	+18 39		15.7		compact
12 14.3	+14 47	3096*	15.4		
12 14.7	+16 48	4239	13.5		
12 14.7	+15 36	4237	12.3		m_H = 12.6 S
12 14.8	+16 39		15.2		
12 14.9	+17 55		14.7		
12 15.1	+17 00		15.7		
12 15.3	+17 42		14.7		
12 15.4	+18 40		15.5		
12 15.5	+16 14		15.4		
12 15.7	+20 17		15.6		
12 15.9	+17 32		15.7		
12 15.9	+20 24		15.5		
12 16.0	+16 32		15.7		
12 16.1	+16 34		15.6		
12 16.1	+18 28		15.6		
12 16.2	+17 59		15.5		
12 16.3	+14 42	4254	10.2	+ 2468	m_H = 10.5 Sc
12 16.5	+17 15		15.3		very compact
12 16.6	+19 32		15.7		very diffuse

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4064	11.9	-	-	-	-	SBap	-	-
4152	12.6	S	-	-	-	-	-	-
4192	10.90	Sb	10.89	Sb	10.5	Sb	10.89	Sb+
4237	12.10	S	12.58	Sb	-	-	-	-
4254	10.38	Sc	-	-	10.2	Sc	10.37	Sc-



FIELD No. 99

12^h28^m $+17^o30'$

Survey Plate No. 1576

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
16835	12 18 11.5	+ 18 04 08	4.91
16838	12 18 16.7	+ 15 49 06	6.51
16878	12 20 10.7	+ 20 25 35	8.2
17028	12 27 15.5	+ 14 55 35	7.19
17183	12 34 27.9	+ 17 21 53	5.78
17256	12 38 35.5	+ 15 39 21	7.9

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1215.8 + 1907	medium compact	105	1.4	VD	2
1217.0 + 1646	medium compact	546	6.4	D	3
1217.2 + 1906	medium compact	698	7.6	MD	1
1217.6 + 1726	medium compact	59	1.0	ED	38
1218.8 + 1736	medium compact	88	1.6	ED	36
1218.9 + 1915	medium compact	73	1.2	ED	22
1219.6 + 1859	compact	67	0.7	ED	41
1220.7 + 1709	medium compact	125	2.1	VD	35
1220.9 + 2028	open	174	3.8	MD	18
1221.5 + 1920	open	99	2.0	VD	34
1221.6 + 1620	medium compact	130	2.2	VD	55
1222.1 + 1510	compact	52	0.9	ED	37
1223.4 + 1941	medium compact	232	3.5	VD	16
1223.5 + 1627	compact	59	1.3	ED	56
1224.0 + 1805	compact	105	2.2	D	33
1224.4 + 1539	compact	41	0.4	ED	54
1224.4 + 2005	compact	118	1.4	ED	7
1225.6 + 1905	open	235	3.5	VD	19
1226.5 + 1641	compact	71	1.6	VD	52
1226.5 + 1940	compact	202	1.7	ED	8
1226.9 + 1735	medium compact	98	3.3	D	32
1227.2 + 1440	medium compact	91	1.7	VD	53
1227.3 + 1827	open	222	3.7	D	20
1227.7 + 1637	medium compact	120	1.6	ED	50
1228.5 + 1615	compact	121	1.6	VD	51
1229.3 + 1717	open	77	1.5	ED	49
1230.8 + 1946	compact	61	0.7	ED	15
1230.9 + 1444	medium compact	53	1.0	ED	48
1231.0 + 1740	medium compact	102	1.8	VD	30
1231.3 + 1437	compact	36	0.7	ED	17
1231.9 + 1530	compact	407	2.8	ED	47
1232.7 + 1653	compact	303	4.6	MD	31
1232.8 + 1931	compact	81	1.3	VD	13
1233.1 + 1929	compact	40	0.4	ED	14
1233.6 + 1546	medium compact	124	1.5	ED	46
1233.9 + 2002	medium compact	84	1.5	VD	6
1234.6 + 1919	medium compact	274	2.3	ED	12
1235.5 + 1836	medium compact	128	2.1	VD	21
1236.0 + 1536	medium compact	174	3.6	MD	45
1236.7 + 1603	medium compact	58	1.2	ED	44
1236.7 + 1707	medium compact	305	4.7	MD	28
1236.8 + 1901	compact	112	1.1	ED	10
1237.0 + 2024	compact	52	0.6	ED	11
1237.1 + 1801	medium compact	109	3.5	MD	25
1237.4 + 1504	medium compact	69	1.2	ED	43
1238.1 + 1834	compact	42	0.5	ED	24
1238.2 + 1556	compact	76	1.3	ED	40
1238.6 + 1637	medium compact	118	1.8	VD	29
1238.8 + 1817	compact	73	1.0	ED	23
1239.0 + 1744	medium compact	93	2.1	D	27
1239.2 + 1900	compact	568	5.2	MD	9
1239.4 + 2006	compact	59	0.7	ED	5
1239.6 + 1616	medium compact	78	1.3	ED	39
1239.9 + 2001	compact	87	0.8	ED	4
1240.1 + 1510	compact	73	1.0	ED	42
1240.7 + 1722	medium compact	91	1.5	VD	26

Average number of galaxies per cluster = 141.8

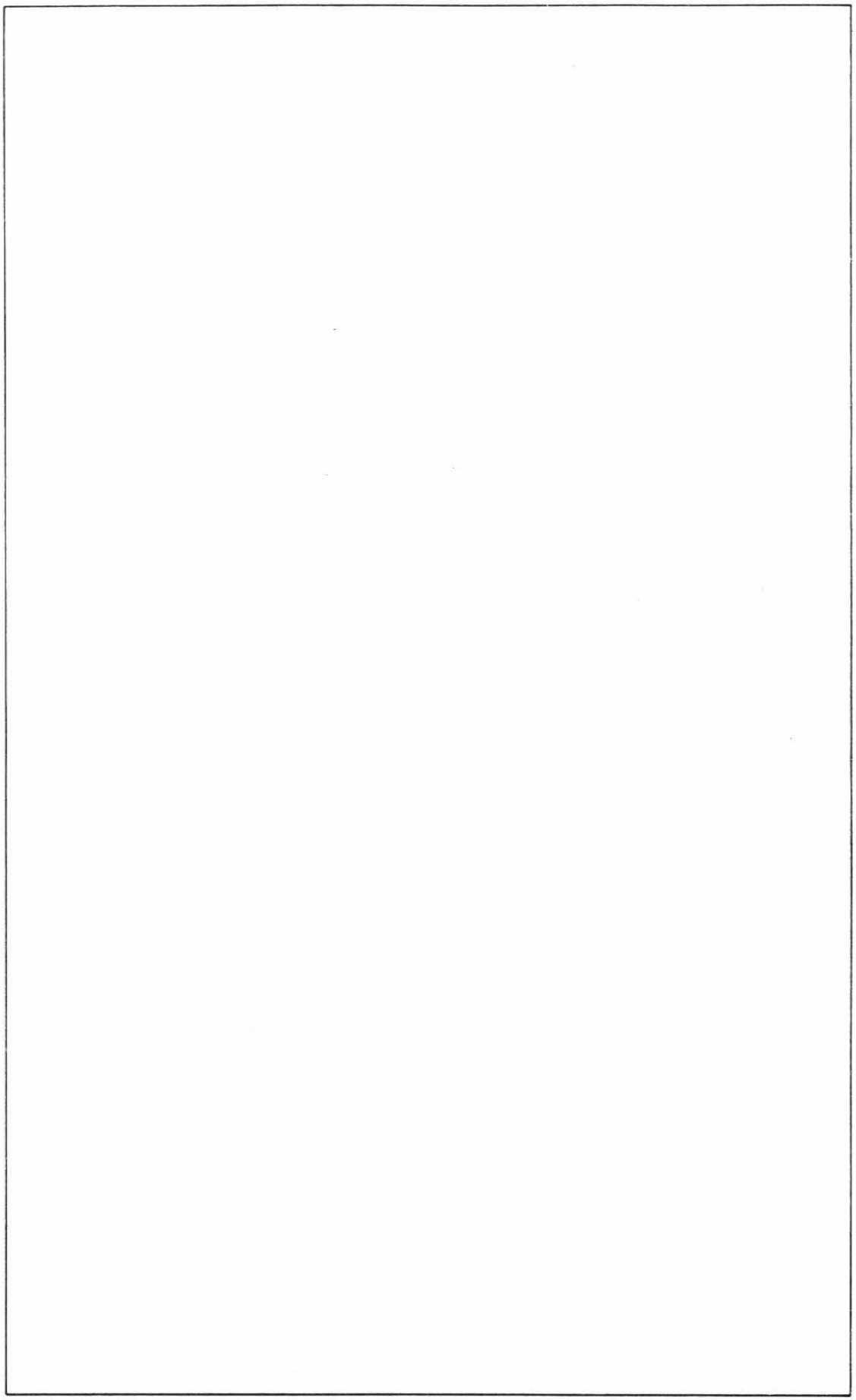
GALAXIES

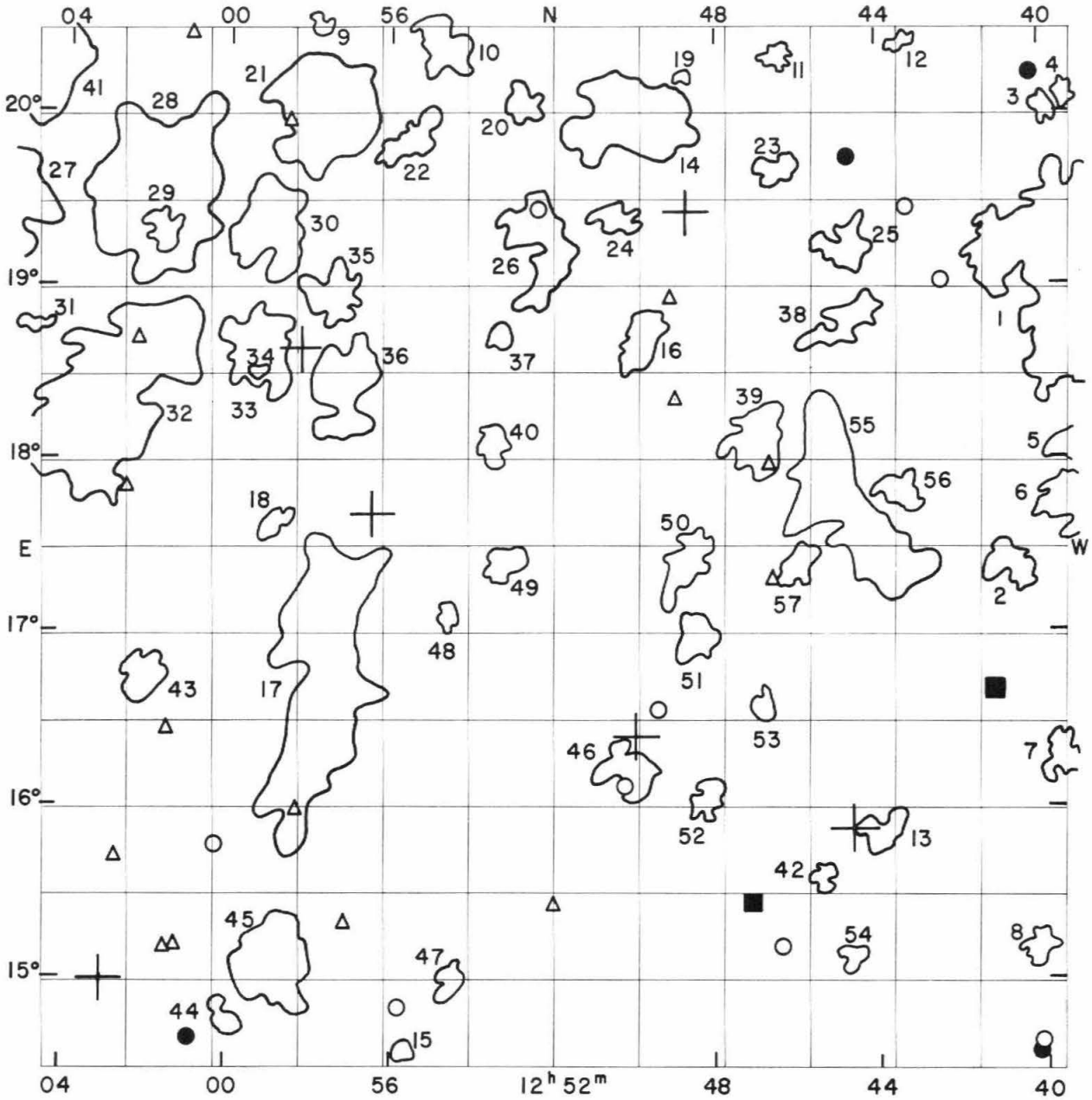
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 15.3 +17 42		14.7		
12 15.4 +18 40		15.5		
12 15.5 +16 14		15.4		
12 15.7 +20 17		15.6		
12 15.9 +17 32		15.7		
12 15.9 +20 24		15.5		
12 16.0 +16 32		15.7		
12 16.1 +16 34		15.6		
12 16.1 +18 28		15.6		
12 16.2 +17 59		15.5		
12 16.3 +14 42	4254	10.2	+ 2468	m_H = 10.5 Sc
12 16.5 +17 15		15.3		very compact
12 16.6 +19 32		15.7		very diffuse
12 17.0 +15 09	4262	12.3		m_H = 12.6 E
12 17.0 +17 30		15.5		very diffuse
12 17.4 +17 53		15.2		diffuse
12 17.6 +15 14	781*	14.8		
12 17.8 +17 38		14.7		
12 18.2 +19 23		15.7		
12 18.3 +17 18		15.1		
12 18.3 +17 46		15.1		diffuse
12 18.7 +17 55		15.2		
12 18.7 +18 40	4293	11.6	+ 750	m_H = 11.7 S
12 19.0 +14 53	4298	12.2		m_H = 12.5 S
12 19.1 +16 00	783*	15.0		diffuse
12 19.1 +16 15		15.7		
12 19.2 +14 53	4302	13.4		m_H = 13.2
12 19.8 +15 02		15.2		
12 20.0 +15 49	4312	12.9		
12 20.4 +16 06	4321	10.6	+ 1617	m_H = 10.8 Sc
12 20.5 +16 11	4322=4323	15.7		diffuse
12 20.6 +14 44	3238*	15.2		
12 20.7 +14 40	3244*	15.3		
12 20.8 +16 05	4328	15.0		
12 21.0 +19 43	4336=3254*	13.6		
12 21.1 +17 00	4340	12.4		m_H = 13.0
12 21.1 +17 49	4344	13.7		
12 21.4 +16 58	4350	11.5	+ 1184	m_H = 12.0 E
12 22.3 +18 28	3292*	15.5		
12 22.6 +17 17	3298*	15.3		
12 22.7 +15 02	4377	12.5		m_H = 12.9 E double nebula
12 22.7 +15 54	4379	12.6		m_H = 13.0
12 22.9 +16 24	787*	15.4		
12 22.9 +16 45	4383	12.3		m_H = 12.9 E
12 22.9 +18 28	4382	10.2	+ 773	m_H = 10.5 E
12 23.1 +16 06	3313*	15.6		diffuse
12 23.4 +18 30	4394	11.9	+ 772	m_H = 12.2 SBb
12 23.5 +15 09	3327*	15.5		
12 23.5 +15 57	4396	13.7		
12 23.6 +16 28	4405=788*	12.9		
12 24.0 +16 55		15.7		very compact
12 24.0 +17 07	3365*	15.5		
12 24.3 +16 33		15.6		very compact
12 24.4 +15 19	4419	11.6		m_H = 12.2 Sc
12 24.5 +15 45	4421	12.9	+ 1692	
12 24.6 +16 37	792*	15.1		
12 24.7 +16 12	3365*	15.0		

Position α 1950 h m	δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 24.8	+16 17	3369*	15.1		
12 25.1	+18 43		15.7		very diffuse
12 25.5	+17 34	3378*+3379*	15.3		double system
12 25.6	+20 27		15.5		
12 25.9	+17 21	4450	11.2	+ 2048	m_H = 11.4 Sb
12 25.9	+18 41	3391*	13.9		
12 26.1	+19 44		15.2		
12 26.2	+15 16	3392*	13.3		
12 26.3	+19 45		15.7		
12 26.6	+19 17	3410*	15.7		compact
12 26.9	+16 41	796*	13.9		
12 27.6	+16 39		15.6		
12 28.0	+19 05	3434*	15.4		
12 28.0	+19 56	3436*	15.0		
12 28.1	+15 24	3435*	15.7		
12 28.3	+17 02	4489	13.2		
12 29.0	+15 08	3453*	15.2		
12 29.1	+17 08	4498	12.8		
12 29.4	+14 42	4501	10.6	+ 2120	m_H = 10.9 Sc
12 29.4	+15 24	797*	13.9		
12 29.5	+16 58	4502	14.8		
12 29.5	+20 25		15.1		extremely compact
12 29.8	+16 18	3471*	15.7		very diffuse
12 29.8	+18 31	3473*	15.4		diffuse
12 29.9	+16 35		15.7		compact
12 30.0	+15 41	798*	15.3		compact
12 30.1	+18 17		15.3		
12 30.4	+20 27		15.3		
12 30.5	+16 32	4515	13.3		
12 30.6	+14 51	4516	13.9		
12 30.6	+17 40	3484*	15.4		
12 31.3	+15 26	4523	15.1		disrupted system
12 31.4	+15 38	800*	14.3		
12 31.6	+16 14		15.3		
12 32.0	+18 28	4539	13.5		
12 32.3	+15 50	4540	12.5		m_H = 12.9 S
12 32.3	+18 05		15.2		diffuse
12 32.4	+15 51	3528*	15.2		
12 32.9	+14 46	4548	11.5	+ 433	m_H = 11.9 SBb
12 33.2	+14 41		15.7		
12 33.6	+19 36	4561	12.7		m_H = 12.9 Irr.
12 34.7	+20 25		15.3		
12 35.3	+14 33	3609*	15.2		compact
12 36.0	+14 38		15.5		
12 36.5	+15 00	3621*	15.4		
12 36.5	+18 01		15.7		double system
12 36.5	+18 27	3615*	15.4		
12 37.1	+16 51	803*	15.3		multiple system, filaments
12 37.3	+15 34	4595	12.8		m_H = 13.1
12 37.8	+14 59	3637*	15.6		very diffuse
12 37.8	+16 12		14.9		
12 37.8	+17 02		15.6		very compact
12 38.8	+14 58	3658*	15.5		diffuse
12 40.1	+14 38	4633=3688*	14.7		
12 40.2	+14 34	4634	13.6		
12 40.2	+20 12	4635	13.7		m_H = 13.0

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4254	10.38	Sc	-	-	10.2	Sc	10.37	Sc-
4262	12.07	E	12.52	Sb0	-	-	-	-
4293	11.1	S	-	-	-	Sa	-	-
4298	11.5	-	-	-	-	-	11.95	Sc-
4302	-	-	-	-	-	-	12.44	S
4312	11.9	-	-	-	-	-	12.50	S
4321	9.89	Sc	-	-	-	Sc	10.07	Sc-
4340	11.93	-	-	-	-	-	-	-
4350	11.81	E	12.3	E7	11.9	S0	-	-
4377	12.59	E	-	-	-	-	-	-
4379	12.4	-	12.79	SB0	-	-	-	-
4382	9.87	E	-	-	-	S0	10.05	S0
4383	12.5	-	-	-	-	-	-	-
4394	11.35	SBb	11.60	SBb	11.6	SBb	11.81	Sb-
4396	12.6	-	-	-	-	-	-	-
4419	12.0	-	12.08	SBa	-	-	-	-
4421	12.36	Sa	11.87	SBa	11.8	SBa	-	-
4450	10.85	Sb	-	-	-	Sb	10.81	Sb-
4498	12.2	-	-	-	-	-	-	-
4501	10.34	Sc	-	-	-	Sc	10.07	Sb+
4516	13.2	-	-	-	-	-	-	-
4539	-	-	-	-	-	-	12.81	Sa
4540	12.1	-	-	-	-	-	-	-
4548	11.00	SBb	11.04	SBb	10.9	SBb	10.86	Sb+
4633	-	-	-	-	-	-	13.69	Sc+
4634	-	-	-	-	-	-	13.10	S
3392*	12.8	-	-	-	-	-	-	-





FIELD No. 100

12^h52^m $+17^\circ30'$

Survey Plate No. 1572

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
17370	12 44 40.5	+ 15 51 53	6.68
17442	12 48 43.9	+ 19 25 58	7.35
17469	12 49 58.3	+ 16 23 38	6.25
17616	12 56 27.1	+ 17 40 42	4.96
17654	12 58 11.6	+ 18 38 28	6.12
17742	13 03 00.1	+ 14 59 34	7.8

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1237.1 + 1801	medium compact	109	3.5	MD	5
1239.0 + 1744	medium compact	93	2.1	D	6
1239.2 + 1900	compact	568	5.2	MD	1
1239.4 + 2006	compact	59	0.7	ED	4
1239.6 + 1616	medium compact	78	1.3	ED	7
1239.9 + 2001	compact	87	0.8	ED	3
1240.1 + 1510	compact	73	1.0	ED	8
1240.7 + 1722	medium compact	91	1.5	VD	2
1243.4 + 2025	compact	52	0.5	ED	12
1243.5 + 1748	medium compact	81	1.4	ED	56
1244.0 + 1550	medium compact	96	1.3	ED	13
1244.7 + 1913	medium compact	122	1.5	VD	25
1244.8 + 1506	compact	54	0.8	ED	54
1244.8 + 1741	open	204	3.8	MD	55
1244.8 + 1847	medium compact	133	1.5	ED	38
1245.5 + 1535	medium compact	54	0.8	ED	42
1246.0 + 1723	medium compact	69	1.3	ED	57
1246.5 + 1940	compact	75	1.2	ED	23
1246.5 + 2020	compact	65	0.9	ED	11
1246.9 + 1635	compact	57	0.9	ED	53
1247.0 + 1806	open	125	2.1	VD	39
1248.2 + 1602	medium compact	69	1.2	ED	52
1248.5 + 1659	compact	93	1.4	ED	51
1248.7 + 1722	medium compact	78	1.6	VD	50
1248.8 + 2012	compact	35	0.4	ED	19
1249.8 + 1840	medium compact	67	1.6	VD	16
1250.0 + 1959	open	96	3.3	D	14
1250.1 + 1613	open	73	1.5	VD	46
1250.5 + 1923	compact	97	1.2	ED	24
1252.2 + 1914	medium compact	116	2.4	MD	26
1252.7 + 2001	medium compact	62	1.1	ED	20
1253.2 + 1724	compact	80	1.3	ED	49
1253.3 + 1842	compact	66	0.8	ED	37
1253.5 + 1805	open	61	1.1	ED	40
1254.5 + 1459	compact	57	1.0	ED	47
1254.6 + 1705	compact	50	0.7	ED	48
1254.8 + 2024	compact	115	1.6	VD	10
1255.5 + 1950	open	89	1.5	VD	22
1255.7 + 1436	medium compact	52	0.6	VD	15
1257.1 + 1824	open	117	2.3	D	36
1257.5 + 1641	open	139	4.9	MD	17
1257.5 + 1856	medium compact	91	1.7	VD	35
1257.7 + 2000	medium compact	182	3.5	D	21
1257.8 + 2030	compact	49	0.6	ED	9
1258.8 + 1505	open	100	2.4	VD	45
1258.9 + 1736	medium compact	52	1.0	ED	18
1259.0 + 1920	medium compact	115	2.4	D	30
1259.2 + 1837	medium compact	98	2.3	D	33
1259.3 + 1829	compact	49	0.5	ED	34
1300.0 + 1445	medium compact	48	1.0	ED	44
1301.6 + 1918	compact	61	1.2	VD	29
1301.9 + 1931	medium compact	202	4.8	MD	28
1302.0 + 1644	medium compact	71	1.5	ED	43
1303.0 + 1819	open	294	4.7	MD	32
1304.8 + 1845	medium compact	47	0.7	ED	31
1305.6 + 1926	open	128	3.3	D	27

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1306.6 + 2018	medium compact	225	6.3	D	41

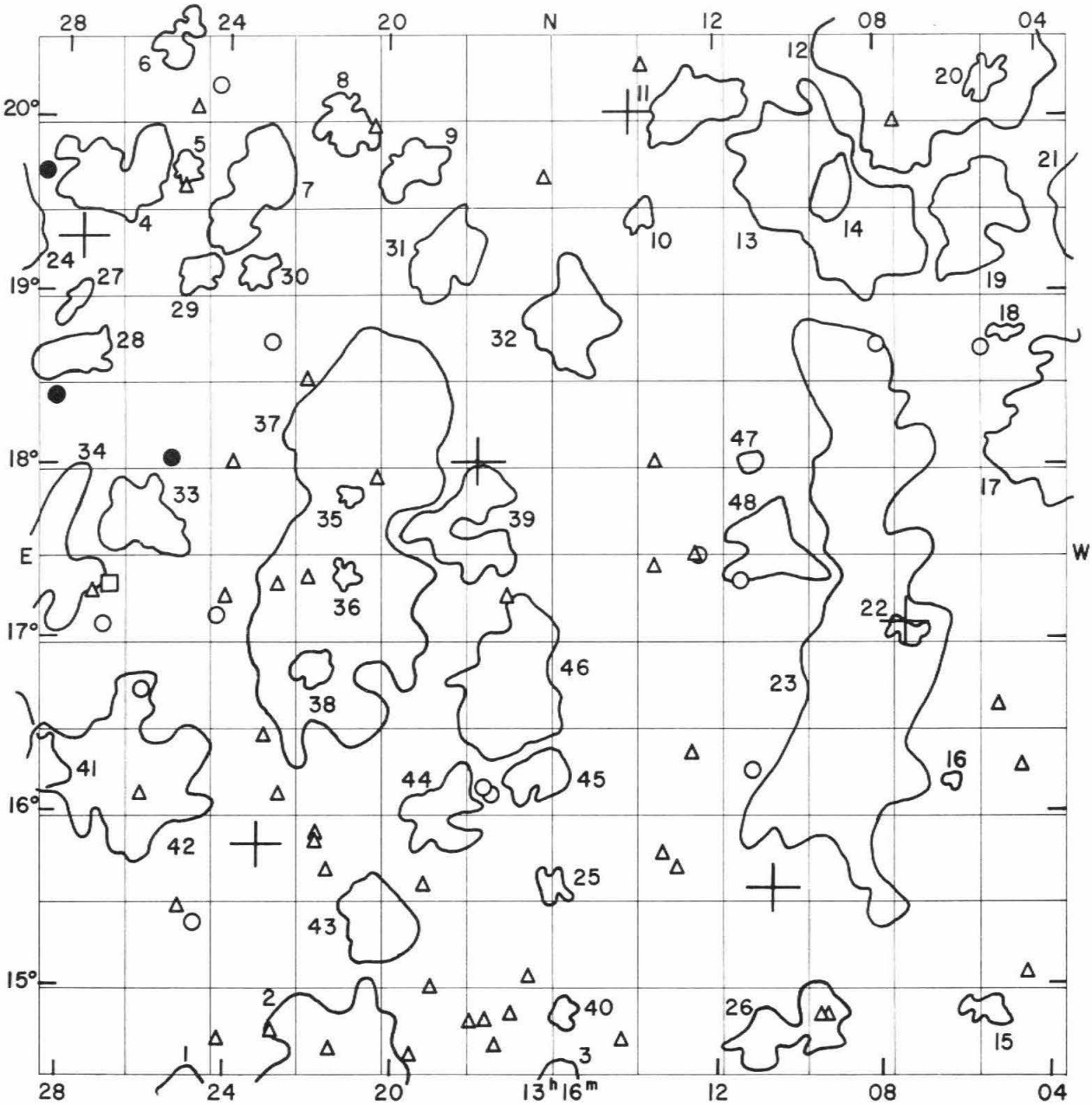
Average number of galaxies per cluster = 101.2

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 40.1	+ 14 38	4633=3688*	14.7		
12 40.2	+ 14 34	4634	13.6		
12 40.2	+ 20 12	4635	13.7		m_H = 13.0
12 41.3	+ 16 40	4651	11.3		m_H = 11.8 S
12 42.4	+ 19 01	3725*	14.4		
12 43.2	+ 19 27	3745*	15.0		
12 44.7	+ 19 44	4685	13.8		
12 46.5	+ 15 10	3806*	14.6		
12 46.6	+ 17 17		15.5		compact
12 46.7	+ 17 58		15.7		
12 47.2	+ 15 26	4710	11.6		m_H = 12.0 Sa
12 49.0	+ 18 20		15.3		system with jet
12 49.1	+ 18 55		15.7		
12 49.5	+ 16 33	827*	15.0		
12 50.2	+ 16 07	4758	14.1		
12 52.0	+ 15 25		15.6		
12 52.4	+ 19 27	3881*	14.1		
12 55.8	+ 14 50		14.9		
12 57.1	+ 15 20		15.7		
12 58.3	+ 15 59		15.5		
12 58.5	+ 19 57	4047*	15.7		
13 00.3	+ 15 47		14.6		
13 00.9	+ 14 39	4935	13.9		
13 00.9	+ 20 27	4122*	15.5		
13 01.2	+ 15 11		15.6		
13 01.5	+ 15 10		15.3		triple system
13 01.5	+ 16 27		15.4		
13 02.2	+ 18 42		15.7		extremely diffuse spiral
13 02.5	+ 17 50		15.3		
13 02.7	+ 15 42		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4633	-	-	-	-	-	-	13.69	Sc+
4634	-	-	-	-	-	-	13.10	S
4651	11.5	Sc	-	-	-	-	11.21	Sc-
4710	11.7	-	11.91	S0	-	-	-	-



FIELD No. 101

13^h16^m $+17°30'$

Survey Plate No. 80

GC Stars

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
17825	13 07 20.3	+ 17 06 53	6.18
17897	13 10 39.8	+ 15 34 55	7.5
17970	13 14 06.7	+ 20 02 54	6.29
18041	13 17 49.3	+ 18 01 44	7.01
18154	13 23 13.3	+ 15 49 25	7.00
18250	13 27 36.2	+ 19 19 05	7.30

CLUSTERS OF GALAXIES

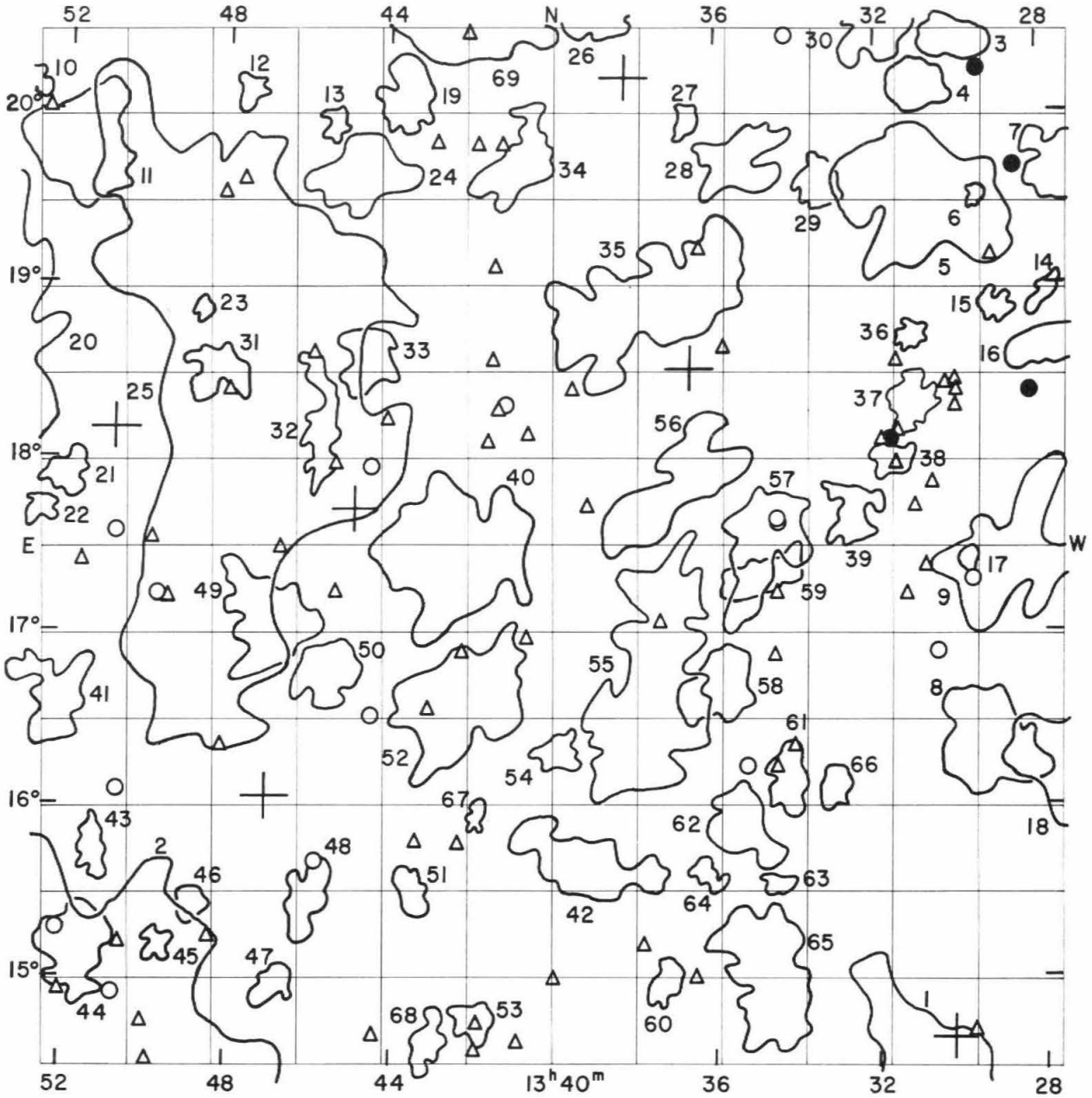
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1301.9 + 1931	medium compact	202	4.8	MD	21
1303.0 + 1819	open	294	4.7	MD	17
1304.8 + 1845	medium compact	47	0.7	ED	18
1305.2 + 2013	medium compact	71	1.3	ED	20
1305.6 + 1451	open	54	1.2	ED	15
1305.6 + 1926	open	128	3.3	D	19
1306.3 + 1610	compact	42	0.5	ED	16
1306.6 + 2018	medium compact	225	6.3	D	12
1307.3 + 1701	medium compact	66	1.0	ED	22
1308.2 + 1700	open	218	8.6	MD	23
1309.0 + 1936	compact	69	1.6	ED	14
1309.1 + 1934	open	197	5.3	MD	13
1310.3 + 1443	open	106	2.4	ED	26
1310.6 + 1733	open	116	2.4	VD	48
1311.1 + 1802	medium compact	57	0.7	ED	47
1312.4 + 2005	medium compact	165	2.3	ED	11
1313.8 + 1927	medium compact	95	1.0	ED	10
1315.5 + 1851	open	144	2.6	ED	32
1315.7 + 1411	open	103	3.0	MD	3
1315.8 + 1451	compact	72	0.9	ED	40
1316.0 + 1535	medium compact	92	1.1	ED	25
1316.3 + 1613	medium compact	83	1.6	D	45
1317.0 + 1643	open	147	3.9	MD	46
1318.1 + 1740	medium compact	132	2.6	D	39
1318.6 + 1914	open	114	2.3	VD	31
1318.7 + 1600	open	117	2.2	VD	44
1319.5 + 1945	compact	169	1.8	ED	9
1320.2 + 1523	medium compact	134	2.4	D	43
1320.9 + 1730	medium compact	328	8.5	MD	37
1320.9 + 1750	compact	62	0.6	ED	35
1321.0 + 1724	compact	77	0.8	ED	36
1321.1 + 1958	compact	158	1.8	ED	8
1321.4 + 1358	open	278	8.0	Near	2
1321.8 + 1650	medium compact	83	1.3	ED	38
1323.3 + 1907	medium compact	53	1.1	ED	30
1323.4 + 1936	medium compact	170	2.8	VD	7
1324.7 + 1907	medium compact	80	1.3	ED	29
1324.8 + 1423	open	151	2.0	D	1
1325.0 + 1944	compact	68	1.0	ED	5
1325.3 + 2028	medium compact	108	1.6	ED	6
1326.0 + 1741	compact	148	2.4	VD	33
1326.4 + 1612	medium compact	277	4.8	D	42
1326.7 + 1938	medium compact	129	3.0	D	4
1327.8 + 1839	compact	163	1.8	VD	28
1327.9 + 1856	medium compact	53	1.0	VD	27
1328.6 + 1725	open	199	3.9	D	34
1329.2 + 1621	compact	208	2.5	VD	41
1330.8 + 1931	medium compact	270	4.7	D	24

Average number of galaxies per cluster = 135.9

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 04.5 +15 04		15.7		
13 04.6 +16 16	848*	15.4		
13 05.1 +16 37		15.4		compact
13 05.4 +18 41	4978	14.4		
13 07.6 +19 59		15.1		
13 08.0 +18 43		14.8		
13 09.3 +14 50		15.7		compact
13 09.5 +14 50		15.7		
13 11.1 +16 15		14.9		
13 11.4 +17 20	857*	14.7		
13 12.4 +17 29	858*	14.7		
13 12.5 +17 29	859*	15.2		
13 12.6 +16 21		15.7		
13 13.0 +15 41		15.6		
13 13.3 +15 46		15.7		
13 13.5 +17 25		15.7		
13 13.5 +18 01		15.7		
13 13.8 +20 18	862*	15.2		compact
13 14.3 +14 41		15.5		double system, tidal effect
13 16.2 +19 40		15.6		
13 16.6 +15 03		15.3		
13 17.0 +14 50		15.6		
13 17.1 +17 15		15.2		
13 17.4 +14 39		15.7		
13 17.5 +16 07	881*	14.8		
13 17.7 +14 49		15.6		
13 17.7 +16 10	882*	15.0		
13 18.0 +14 48		15.4		
13 19.0 +15 00		15.5		
13 19.2 +15 35		15.5		
13 19.5 +14 36		15.6		diffuse
13 20.3 +17 56		15.6		
13 20.4 +19 57		15.7		
13 21.5 +14 38		15.6		
13 21.5 +15 40		15.7		
13 21.8 +15 50		15.7		
13 21.8 +15 52		15.6		
13 22.0 +17 21		15.6		
13 22.1 +18 30		15.7		
13 22.7 +16 06		15.6		
13 22.8 +14 45		15.7		
13 22.8 +17 19		15.2		
13 22.9 +18 43		15.0		
13 23.0 +16 27		15.7		
13 23.9 +18 01		15.5		
13 24.0 +17 14		15.6		
13 24.1 +14 41		15.3		double system
13 24.2 +17 08	5151	14.9		
13 24.3 +20 13		14.9		
13 24.7 +15 21		14.1		
13 24.8 +20 04		15.7		diffuse
13 25.1 +15 26		15.7		
13 25.1 +19 36		15.2		double system
13 25.3 +18 02	5188	13.8		m_H = 12.7 S
13 26.0 +16 06		15.7		quintuple system
13 26.0 +16 43		14.9		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 26.9 +17 19	5172	12.7		m_H = 12.5 S
13 27.0 +17 05	5180	14.3		
13 27.3 +17 16		15.7		
13 28.2 +18 24	5190	13.7		
13 28.6 +19 42		14.0		nucleus eccentric



FIELD No. 102

13^h40^m $+17^o30'$

Survey Plate No. 1019

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18304	13 30 09.5	+ 14 39 00	7.08
18454	13 36 37.9	+ 18 31 08	6.46
18485	13 38 17.2	+ 20 12 28	5.65
18637	13 44 53.1	+ 17 42 19	4.51
18674	13 47 03.9	+ 16 02 42	4.28
18764	13 50 49.5	+ 18 10 42	5.71

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1326.4 + 1612	medium compact	277	4.8	D	18
1326.7 + 1938	medium compact	129	3.0	D	7
1327.8 + 1839	compact	163	1.8	VD	16
1327.9 + 1856	medium compact	53	1.0	VD	14
1328.6 + 1725	open	199	3.9	D	9
1329.0 + 1852	compact	62	1.1	ED	15
1329.2 + 1621	compact	208	2.5	VD	8
1329.5 + 1931	compact	55	0.6	ED	6
1329.8 + 1725	compact	55	0.8	ED	17
1330.0 + 2027	medium compact	104	1.9	VD	3
1330.7 + 1347	medium compact	373	8.5	Near	1
1330.8 + 1931	medium compact	270	4.7	D	5
1331.0 + 2009	compact	163	1.8	VD	4
1331.1 + 1818	open	71	1.6	ED	37
1331.1 + 1842	compact	73	0.9	ED	36
1331.6 + 1759	compact	88	1.2	VD	38
1331.8 + 2030	compact	166	2.1	VD	30
1332.5 + 1740	medium compact	99	1.6	VD	39
1333.1 + 1605	medium compact	86	1.2	ED	66
1333.4 + 1935	medium compact	61	1.5	ED	29
1334.1 + 1608	medium compact	109	1.6	ED	61
1334.5 + 1531	compact	72	0.9	ED	63
1334.7 + 1501	medium compact	185	3.4	VD	65
1334.8 + 1730	medium compact	95	2.9	D	57
1334.9 + 1718	medium compact	107	1.9	ED	59
1335.3 + 1944	open	79	2.1	D	28
1335.4 + 1552	open	85	2.1	VD	62
1335.9 + 1640	compact	151	2.1	ED	58
1336.1 + 1535	compact	62	0.9	ED	64
1336.7 + 1957	medium compact	52	0.9	ED	27
1336.9 + 1749	open	127	3.3	D	56
1337.2 + 1458	medium compact	102	1.2	ED	60
1337.4 + 1640	open	156	4.7	MD	55
1337.5 + 1854	medium compact	307	4.7	MD	35
1338.9 + 2034	open	66	1.9	VD	26
1339.0 + 1536	open	102	2.8	D	42
1339.8 + 1617	medium compact	103	1.3	ED	54
1340.8 + 1942	medium compact	154	2.2	ED	34
1341.8 + 1556	medium compact	56	0.8	ED	67
1341.9 + 1444	compact	117	1.3	ED	53
1342.1 + 2033	medium compact	123	3.6	MD	69
1342.2 + 1635	open	147	3.7	D	52
1342.4 + 1726	open	173	4.6	MD	40
1343.0 + 1436	open	80	1.4	VD	68
1343.4 + 1529	compact	118	1.3	ED	51
1343.6 + 2005	open	69	1.9	VD	19
1344.6 + 1834	medium compact	94	2.0	D	33
1344.6 + 1939	medium compact	107	2.4	D	24
1345.4 + 1956	medium compact	81	0.9	ED	13
1345.5 + 1645	medium compact	90	2.2	VD	50
1345.6 + 1812	medium compact	128	2.1	VD	32
1345.9 + 1526	open	133	1.6	ED	48
1346.8 + 1457	compact	76	1.3	ED	47
1347.0 + 1701	open	114	2.9	D	49
1347.5 + 1815	open	455	12.5	Near	25
1347.5 + 2006	compact	95	1.0	ED	12
1348.2 + 1830	open	74	1.6	VD	31

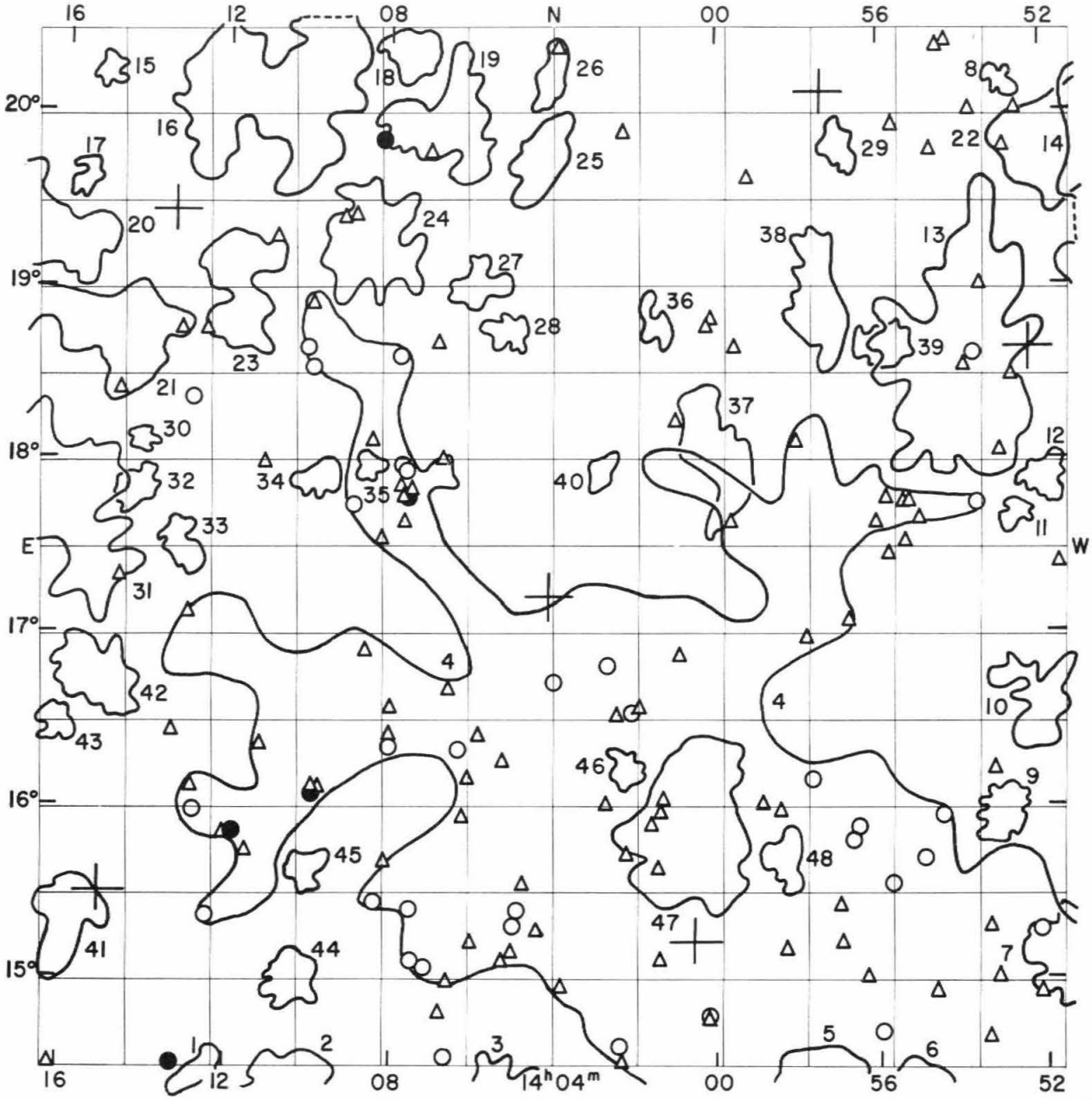
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1348.6 + 1850	compact	54	0.6	ED	23
1348.8 + 1525	medium compact	80	1.1	ED	46
1349.6 + 1510	medium compact	83	1.0	ED	45
1351.2 + 1544	medium compact	94	1.3	ED	43
1351.5 + 1509	compact	181	2.3	VD	44
1351.6 + 1947	open	106	3.5	D	11
1351.9 + 1754	medium compact	66	1.4	ED	21
1352.0 + 1636	medium compact	74	2.3	D	41
1352.6 + 1741	compact	80	1.0	ED	22
1352.9 + 2010	medium compact	82	1.0	ED	10
1354.0 + 1834	open	203	5.9	MD	20
1358.7 + 1521	open	923	24.3	Near	2

Average number of galaxies per cluster = 133.7

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 28.2 +18 24	5190	13.7		
13 28.6 +19 42		14.0		nucleus eccentric
13 29.2 +19 10		15.7		
13 29.5 +20 15		13.8		
13 29.7 +14 41		15.7		
13 29.7 +17 18	894*	14.9		
13 30.0 +18 24		15.3		compact
13 30.1 +18 18		15.7		
13 30.1 +18 28		15.7		
13 30.3 +18 26		15.6		compact
13 30.5 +16 54		14.7		
13 30.6 +17 51		15.4		
13 30.8 +17 23		15.7		
13 31.0 +17 44		15.1		
13 31.3 +17 13		15.5		
13 31.5 +17 58	897*	15.4		
13 31.5 +18 10		15.7		
13 31.5 +18 34		15.6		
13 31.7 +18 07	5217	14.0		
13 31.9 +18 06		15.6		
13 34.0 +16 20		15.7		
13 34.3 +20 27		14.8		
13 34.4 +17 43		15.0		
13 34.4 +17 44		15.0		
13 34.5 +16 13		15.2		
13 34.5 +16 51		15.6		
13 34.5 +17 13		15.4		
13 35.2 +16 14	5249	14.5		
13 35.8 +18 39		15.2		
13 36.4 +15 00		15.4		
13 36.4 +19 13		15.3		
13 37.3 +17 04		15.6		
13 37.7 +15 11		15.6		
13 39.1 +17 43		15.2		
13 39.5 +18 24		15.4		
13 40.0 +15 00		15.3		
13 40.6 +16 57		15.4		
13 40.6 +18 08		15.5		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
13	40.8	+14 37		15.6		
13	41.1	+18 18		14.9		compact
13	41.2	+19 49		15.5		diffuse
13	41.3	+18 16		15.5		double nebula
13	41.4	+19 06		15.7		
13	41.5	+18 34		15.6		
13	41.6	+18 05		15.5		
13	41.8	+14 44		15.4		
13	41.9	+14 35		15.5		
13	41.9	+19 50		15.7		
13	42.1	+20 28		15.4		
13	42.2	+16 53		15.5		
13	42.3	+15 46		15.7		
13	42.9	+19 50		15.4		
13	43.0	+16 33		15.5		
13	43.4	+15 47		15.6		diffuse
13	44.0	+18 13		15.3		
13	44.4	+14 40		15.5		
13	44.4	+16 31	5293	14.3		
13	44.5	+17 57		14.7		
13	45.3	+17 14		15.2		
13	45.3	+17 58		15.2		
13	45.8	+15 40		15.0		double system
13	45.9	+18 36		15.3		
13	46.6	+17 29		15.5		diffuse
13	47.6	+19 37		15.7		
13	48.0	+18 24		15.4		
13	48.1	+16 20		15.2		
13	48.1	+19 32		15.1		
13	48.4	+15 14		15.5		
13	49.4	+17 11		15.7		
13	49.7	+17 13	5332	14.1		
13	49.8	+14 31	4337*	15.2		
13	49.8	+17 32		15.4		
13	50.0	+14 44	950*	15.2		double system
13	50.5	+15 12		15.6		
13	50.6	+16 05		14.9		
13	50.7	+14 54		15.0		double system
13	50.7	+17 35		14.8		very compact
13	51.6	+17 24		15.6		double system, collision
13	52.0	+14 55		15.7		
13	52.1	+15 17		14.1		
13	52.5	+20 00		15.2		



FIELD No. 103

14^h04^m $+17^\circ30'$

Survey Plate No. 81

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18805	13 52 18.2	+ 18 38 51	2.80
18925	13 57 26.5	+ 20 07 28	8.8
18978	14 00 32.4	+ 15 12 54	7.16
19043	14 04 06.5	+ 17 12 28	6.76
19242	14 13 22.8	+ 19 26 31	0.24
19284	14 15 04.9	+ 15 29 38	6.05

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1347.5 + 1815	open	455	12.5	Near	14
1351.5 + 1509	compact	181	2.3	VD	7
1351.6 + 1947	open	106	3.5	D	22
1351.9 + 1754	medium compact	66	1.4	ED	12
1352.0 + 1636	medium compact	74	2.3	D	10
1352.6 + 1741	compact	80	1.0	ED	11
1352.9 + 2010	medium compact	82	1.0	ED	8
1353.0 + 1559	open	86	1.7	ED	9
1354.0 + 1834	open	203	5.9	MD	13
1355.0 + 1422	medium compact	132	2.2	D	6
1355.9 + 1840	medium compact	95	1.6	D	39
1357.0 + 1948	medium compact	66	1.3	ED	29
1357.4 + 1430	compact	232	1.8	VD	5
1357.5 + 1855	open	84	2.5	VD	38
1358.4 + 1542	medium compact	84	1.6	VD	48
1358.7 + 1521	open	923	24.3	Near	4
1400.0 + 1801	compact	191	2.8	VD	37
1400.7 + 1552	compact	250	4.5	MD	47
1401.5 + 1846	medium compact	80	1.2	ED	36
1402.2 + 1613	medium compact	59	1.2	ED	46
1402.8 + 1755	medium compact	71	1.0	ED	40
1404.0 + 2013	medium compact	128	1.4	ED	26
1404.3 + 1944	open	95	2.3	VD	25
1405.1 + 1844	medium compact	127	1.3	ED	28
1405.3 + 1413	compact	371	3.4	D	3
1405.8 + 1900	open	62	1.6	VD	27
1406.7 + 1956	medium compact	137	3.1	MD	19
1407.5 + 2020	medium compact	99	1.8	VD	18
1408.4 + 1915	medium compact	119	3.3	MD	24
1408.5 + 1758	compact	57	0.8	ED	35
1409.5 + 1414	compact	548	5.0	D	2
1409.8 + 1753	medium compact	137	1.3	ED	34
1410.0 + 1538	medium compact	68	1.3	ED	45
1410.4 + 1500	compact	95	1.7	VD	44
1410.8 + 2005	medium compact	162	5.4	MD	16
1411.7 + 1859	medium compact	121	2.9	D	23
1412.5 + 1430	open	64	1.5	VD	1
1413.1 + 1729	open	118	1.4	ED	33
1414.1 + 1806	medium compact	54	0.8	ED	30
1414.2 + 1750	medium compact	78	1.4	D	32
1415.0 + 2014	compact	69	1.0	ED	15
1415.1 + 1645	open	69	2.4	VD	42
1415.5 + 1936	open	56	1.0	ED	17
1415.7 + 1520	medium compact	98	2.4	VD	41
1416.1 + 1628	medium compact	52	1.3	ED	43
1416.1 + 1916	open	118	3.0	D	20
1416.5 + 1850	medium compact	222	4.6	MD	21
1422.0 + 1732	open	803	11.6	Near	31

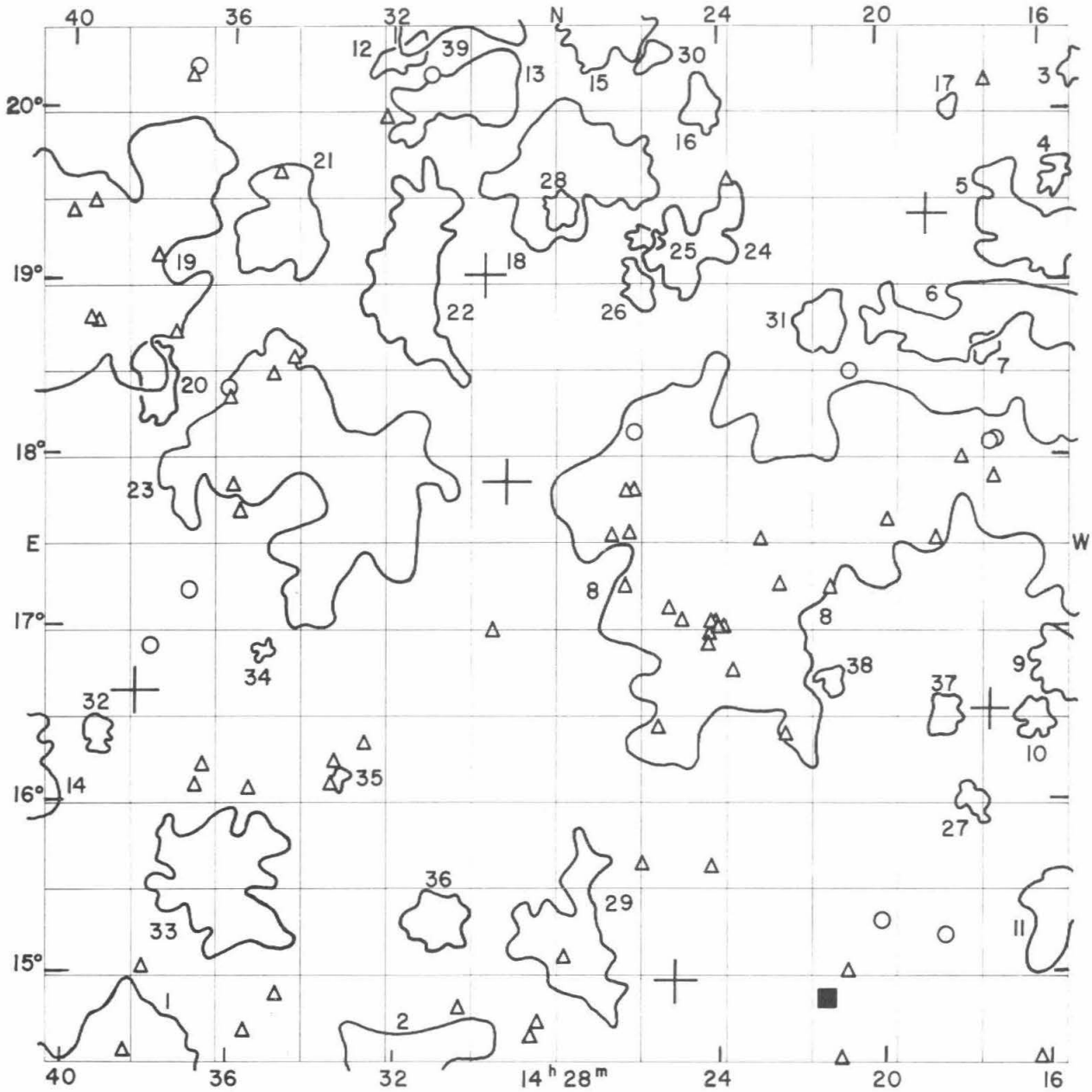
Average number of galaxies per cluster = 161.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 51.6 +17 24		15.6		double system, collision
13 52.0 +14 55		15.7		
13 52.1 +15 17		14.1		
13 52.5 +20 00		15.2		
13 52.7 +18 29		15.6		
13 52.8 +19 48		15.6		
13 53.0 +18 01		15.7		extremely diffuse
13 53.2 +14 59		15.7		compact
13 53.2 +16 12		15.7		
13 53.4 +14 39		15.6		
13 53.4 +15 17		15.5		
13 53.5 +19 00		15.7		
13 53.6 +17 45	960*	14.8		double system, bridge
13 53.6 +18 37		14.8		
13 53.7 +20 00		15.7		
13 53.9 +18 32		15.5		
13 54.3 +20 24		15.6		
13 54.5 +15 56		14.9		
13 54.5 +20 22		15.4		
13 54.7 +14 54		15.4		very compact
13 54.7 +19 47		15.6		very compact
13 54.9 +15 41		14.5		
13 55.0 +17 38	963*	15.2		
13 55.3 +17 45	964*	15.3		
13 55.4 +17 30		15.6		
13 55.4 +17 45	965*	15.2		
13 55.6 +15 32		14.3		
13 55.6 +19 55		15.7		
13 55.7 +17 26		15.5		
13 55.8 +17 46		15.7		
13 55.9 +14 41	967*	14.7		
13 56.0 +17 38		15.2		
13 56.3 +14 59		15.6		
13 56.5 +15 52		15.0		
13 56.6 +15 48		14.5		
13 56.8 +17 04		15.7		
13 56.9 +15 12		15.5		
13 57.0 +15 25		15.4		
13 57.6 +16 09		14.8		
13 57.8 +16 57		15.7		extremely compact
13 58.0 +18 05		15.7		compact
13 58.3 +15 10		15.7		
13 58.5 +15 58		15.7		
13 58.8 +16 00		15.4		
13 59.2 +19 38		15.6		
13 59.6 +17 38		15.6		
13 59.6 +18 39		15.4		triple system
14 00.1 +14 46		15.6		
14 00.1 +14 47	970*	14.7		
14 00.1 +18 48		15.7		
14 00.3 +18 45		15.2		
14 00.9 +16 52		15.6		double nebula, contact
14 01.0 +18 13		15.7		
14 01.3 +16 02		15.6		
14 01.4 +15 06		15.1		
14 01.4 +15 38		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
14 01.4	+15 58		15.5		
14 01.6	+15 54		15.7		
14 01.8	+16 34		15.7		
14 02.0	+16 32		14.6		
14 02.1	+15 43		15.2		double system
14 02.2	+19 53		15.7		multiple system
14 02.3	+14 30		15.5		
14 02.3	+14 37	5454	14.4		
14 02.4	+16 31		15.7		very diffuse
14 02.6	+16 49		14.9		
14 02.7	+16 00		15.7		
14 03.8	+14 56		15.2		
14 03.9	+20 22		15.4		
14 04.0	+16 43		14.7		
14 04.4	+15 16		15.5		
14 04.7	+15 33	975*	15.6		
14 04.9	+15 19		14.6		
14 04.9	+15 24		15.0		extremely compact
14 05.0	+15 09		15.6		
14 05.2	+15 06		15.5		
14 05.2	+16 15		15.4		
14 05.8	+16 25		15.5		
14 06.0	+15 13		15.7		
14 06.0	+16 10		15.2		
14 06.2	+15 56		15.7		
14 06.3	+16 20		14.9		
14 06.5	+16 40		15.3		
14 06.6	+14 33		14.6		
14 06.6	+15 00		15.4		
14 06.7	+18 00		15.1		
14 06.8	+14 48		15.7		very diffuse
14 06.8	+18 40		15.7		
14 07.0	+19 46		15.7		very compact
14 07.1	+15 04	979*	14.5		
14 07.5	+15 06		15.0		
14 07.5	+15 25		14.8		
14 07.5	+17 49		15.7		
14 07.6	+17 38	984*	15.6		
14 07.6	+17 47	5490	13.4		
14 07.6	+17 56	982*	14.6		
14 07.7	+17 47		15.7		
14 07.7	+17 58	983*	14.3		
14 07.7	+18 36		14.5		
14 07.8	+17 51		15.2		
14 08.0	+16 20		14.7		
14 08.0	+16 25		15.7		diffuse
14 08.0	+16 35		15.6		
14 08.1	+15 41		15.7		
14 08.2	+17 32		15.5		
14 08.2	+19 51	5492	13.7		
14 08.3	+15 27		14.7		
14 08.4	+18 06		15.7		
14 08.6	+16 55		15.5		
14 08.8	+19 25		15.5		double nebula
14 08.9	+17 44		14.6		
14 09.1	+19 24		15.4		
14 09.8	+16 06		15.4		
14 09.9	+16 04	5504	13.9		
14 09.9	+16 07	4383*	15.5		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	′				
14	09.9	+18	32		14.9		
14	09.9	+18	54		15.7		
14	10.0	+18	39		14.9		
14	10.8	+19	17		15.5		
14	11.1	+16	21		15.7		diffuse
14	11.1	+17	59		15.6		
14	11.5	+15	44		15.3		
14	11.8	+15	51		14.0		
14	12.0	+15	50		15.3		
14	12.4	+15	23	5522	14.1		
14	12.6	+18	45		15.7		
14	12.8	+15	58		14.8		
14	12.8	+16	06		15.2		
14	12.8	+18	21		14.7		
14	12.9	+17	07		15.4		compact
14	13.1	+18	45		15.7		very compact
14	13.2	+14	31	5525	14.0		
14	13.3	+16	26		15.4		double system, connected
14	14.6	+17	19		15.5		
14	14.7	+18	24		15.5		
14	16.2	+14	29		15.4		



FIELD NO. 104

14^h28^m $+17^\circ30'$

Survey Plate No. 1417

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ′ ″	
19334	14 17 23.2	+ 16 32 06	4.97
19355	14 18 49.0	+ 19 24 29	7.11
19497	14 25 07.0	+ 14 58 40	7.34
19589	14 29 13.2	+ 17 51 50	7.16
19600	14 29 45.7	+ 19 03 20	7.52
19769	14 38 22.5	+ 16 37 54	4.94

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1415.0 + 2014	compact	69	1.0	ED	3
1415.1 + 1645	open	69	2.4	VD	9
1415.5 + 1936	open	56	1.0	ED	4
1415.7 + 1520	medium compact	98	2.4	VD	11
1416.1 + 1628	medium compact	52	1.3	ED	10
1416.1 + 1916	open	118	3.0	D	5
1416.5 + 1850	medium compact	222	4.6	MD	6
1417.3 + 1837	medium compact	67	0.9	ED	7
1417.8 + 1600	open	76	1.0	ED	27
1418.3 + 2000	compact	57	0.6	ED	17
1418.5 + 1630	compact	67	1.3	VD	37
1421.2 + 1641	compact	66	0.9	ED	38
1421.4 + 1846	medium compact	139	1.8	ED	31
1422.0 + 1732	open	803	11.6	Near	8
1424.4 + 2001	compact	110	1.4	ED	16
1424.6 + 1911	medium compact	117	2.8	D	24
1425.6 + 2018	compact	81	1.0	ED	30
1425.8 + 1915	compact	95	0.9	ED	25
1425.9 + 1858	medium compact	115	1.3	ED	26
1426.4 + 2030	medium compact	215	2.7	D	15
1427.6 + 1511	open	110	3.6	D	29
1427.7 + 1939	compact	345	4.4	D	18
1427.9 + 1925	medium compact	96	1.2	ED	28
1430.3 + 2006	medium compact	187	2.6	D	13
1430.8 + 2040	medium compact	115	3.2	VD	39
1430.9 + 1518	medium compact	66	1.9	VD	36
1431.6 + 1902	open	202	3.8	D	22
1431.9 + 1420	open	190	5.0	MD	2
1431.9 + 2019	medium compact	106	1.4	ED	12
1433.2 + 1609	compact	39	0.5	ED	35
1434.0 + 1755	medium compact	407	7.0	MD	23
1434.8 + 1919	medium compact	157	3.1	VD	21
1435.1 + 1651	compact	44	0.5	ED	34
1436.1 + 1531	medium compact	138	4.1	D	33
1437.9 + 1825	medium compact	92	1.8	VD	20
1438.2 + 1414	medium compact	545	6.4	MD	1
1439.2 + 1623	compact	97	1.0	ED	32
1441.0 + 1614	open	127	2.8	VD	14
1441.2 + 1909	open	358	9.6	Near	19

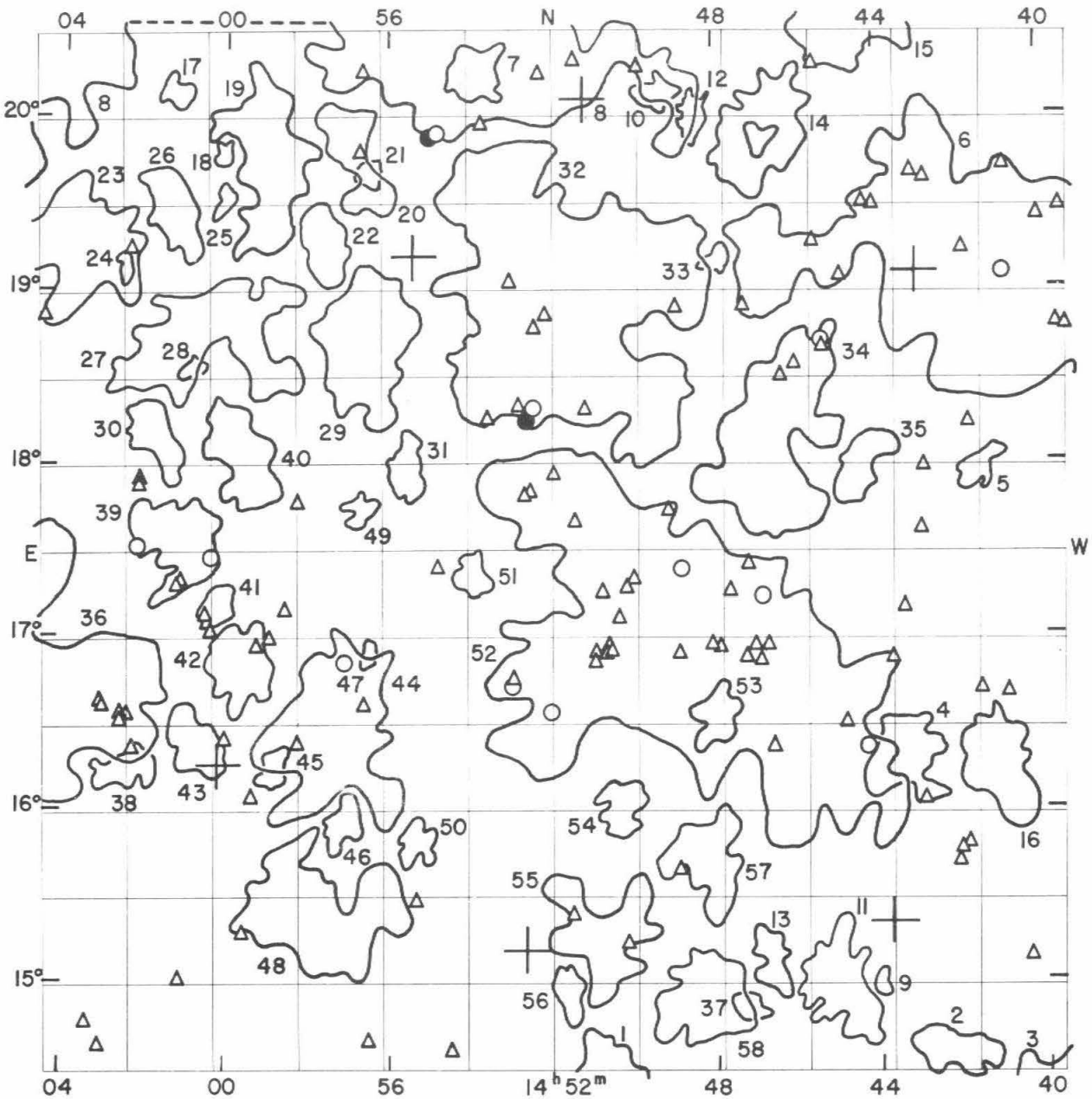
Average number of galaxies per cluster = 156.7

GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
14 16.2 +14 29		15.4		
14 17.2 +17 52		15.3		
14 17.2 +18 06	999*	14.5		
14 17.3 +18 05	1000*	14.4		
14 17.3 +20 10		15.4		very compact
14 18.0 +17 59		15.5		double system
14 18.5 +15 13		15.0		
14 18.7 +17 30		15.7		
14 19.9 +17 37	4410*	15.6		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
14	20.0	+15 18		14.2		
14	20.7	+18 30		14.7		
14	20.9	+15 00		15.5		
14	21.0	+14 28		15.3		
14	21.3	+17 14		15.7		
14	21.5	+14 52	5600	11.9		
14	22.4	+16 23		15.6		
14	22.5	+17 15	4417*	15.5		quadruple system
14	23.0	+17 30		15.5		
14	23.7	+16 45		15.5		compact
14	23.8	+19 37		15.4		
14	23.9	+17 01		15.7		
14	24.0	+17 01		15.6		compact
14	24.1	+17 02		15.7		compact
14	24.2	+15 37		15.3		extremely compact
14	24.2	+16 58		15.6		compact
14	24.2	+17 02		15.7		
14	24.3	+16 55		15.7		compact
14	24.9	+17 03	4426*	15.6		compact
14	25.2	+17 07	4429*	15.4		compact
14	25.5	+16 26	4433*+4434*	15.3		double system
14	25.9	+15 38	1015*	15.2		multiple system
14	26.0	+17 49		15.7		compact
14	26.0	+18 09	5628	14.5		
14	26.2	+17 33	4438*	15.7		diffuse
14	26.3	+17 15	4439*	15.7		
14	26.3	+17 48		15.6		compact
14	26.6	+17 32	4440*	15.6		
14	27.8	+15 06		15.5		double system
14	28.4	+14 44		15.3		
14	28.6	+14 39		15.6		
14	29.6	+16 59		15.5		
14	30.4	+14 49		15.2		double system
14	31.1	+20 13		15.0		
14	32.1	+19 58		15.6		diffuse
14	32.7	+16 20		15.7		
14	33.4	+16 15	4463*	15.4		
14	33.5	+16 07		15.6		
14	34.5	+18 34	4466*	15.5		
14	34.8	+14 53	1034*	15.6		
14	34.8	+19 38		15.7		
14	35.0	+18 28	4469*	15.6		
14	35.5	+16 05	4473*	15.2		triple nebula, connected
14	35.6	+14 40		15.4		
14	35.8	+17 40		15.7		
14	36.0	+17 50		15.7		compact
14	36.0	+18 20	1036*	15.6		
14	36.1	+18 24	1037*	15.0		
14	36.6	+16 13		15.6		
14	36.8	+16 06	4478*	15.3		compact
14	36.9	+20 15	5710	14.3		
14	37.0	+17 14		14.8		
14	37.0	+20 12	5711	15.1		
14	37.4	+18 43	4480*	15.4		
14	37.8	+19 10	4482*	15.5		diffuse
14	38.0	+15 03		15.3		compact
14	38.0	+16 54	4483*	15.0		
14	38.5	+14 33		15.4		
14	39.3	+18 46	4486*	15.2		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
14 39.4 +19 28		15.5		
14 39.5 +18 47	4487*	15.7		
14 40.0 +19 24	1047*	15.7		



FIELD No. 105

14^h52^m $+17^\circ30'$

Survey Plate No. 54

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19862	14 43 02.0	+ 19 05 40	6.39
19885	14 43 44.5	+ 15 20 27	6.10
20041	14 51 14.1	+ 20 05 32	7.01
20065	14 52 39.6	+ 15 10 51	7.01
20134	14 55 27.8	+ 19 11 11	6.71
20231	15 00 13.8	+ 16 14 56	6.99

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1438.2 + 1414	medium compact	545	6.4	MD	3
1441.0 + 1614	open	127	2.8	VD	16
1441.2 + 1909	open	358	9.6	Near	6
1441.4 + 1757	compact	82	1.2	VD	5
1442.3 + 1436	medium compact	187	2.3	D	2
1443.4 + 1617	medium compact	148	2.6	VD	4
1444.0 + 1459	compact	60	0.6	VD	9
1444.4 + 1800	medium compact	119	2.0	VD	35
1444.6 + 2041	open	156	3.7	MD	15
1445.0 + 1458	compact	203	2.8	VD	11
1446.6 + 1809	compact	204	4.8	Near	34
1446.7 + 1506	compact	64	1.6	VD	13
1446.8 + 1954	open	132	3.4	D	14*
1447.3 + 1451	compact	55	1.0	ED	37
1448.0 + 1632	compact	86	1.8	VD	53
1448.0 + 1911	compact	69	0.8	ED	33
1448.2 + 1543	medium compact	122	2.6	VD	57
1448.4 + 1454	compact	145	3.1	D	58
1448.6 + 2000	medium compact	85	1.2	ED	12
1448.7 + 1651	compact	583	11.0	Near	52
1449.4 + 2008	compact	57	1.2	VD	10
1450.3 + 1601	open	88	1.7	ED	54
1450.7 + 1517	medium compact	109	3.3	D	55
1450.8 + 1427	medium compact	225	2.5	MD	1
1451.6 + 1456	compact	113	1.4	ED	56
1451.6 + 1855	compact	510	8.6	Near	32
1453.9 + 2015	compact	99	1.9	VD	7
1454.0 + 1721	compact	68	1.3	ED	51
1455.3 + 1549	compact	106	1.4	ED	50
1455.6 + 1759	compact	198	1.6	ED	31
1456.5 + 1654	compact	57	0.6	ED	47
1456.5 + 1841	compact	205	3.8	D	29
1456.5 + 1940	compact	71	0.9	ED	21
1456.7 + 1744	compact	54	1.0	ED	49
1456.8 + 1945	medium compact	95	2.4	D	20
1457.1 + 1556	compact	114	1.5	ED	46
1457.3 + 1628	medium compact	171	4.7	D	44
1457.6 + 1916	compact	97	2.0	VD	22
1457.8 + 1524	medium compact	184	4.3	VD	48
1458.8 + 1614	compact	68	1.1	ED	45
1459.0 + 1945	open	95	3.6	MD	19
1459.6 + 1651	compact	140	2.3	D	42
1459.6 + 1803	medium compact	93	2.7	VD	40
1459.8 + 2043	open	741	13.5	Near	8
1500.0 + 1930	medium compact	73	0.8	ED	25
1500.1 + 1947	compact	83	0.5	ED	18
1500.2 + 1710	compact	97	1.2	ED	41
1500.3 + 1845	open	160	4.3	MD	27
1500.7 + 1623	compact	126	2.0	ED	43
1500.9 + 1833	compact	62	0.7	ED	28
1501.1 + 1734	medium compact	96	2.8	D	39
1501.2 + 2008	compact	80	1.0	ED	17
1501.4 + 1928	open	82	2.1	D	26
1501.8 + 1810	compact	121	2.0	VD	30
1502.4 + 1614	medium compact	163	1.6	ED	38
1502.5 + 1908	compact	59	0.6	ED	24

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1504.0 + 1915	open	101	4.1	MD	23
1504.6 + 1639	open	232	6.8	Near	36

Average number of galaxies per cluster = 152.1

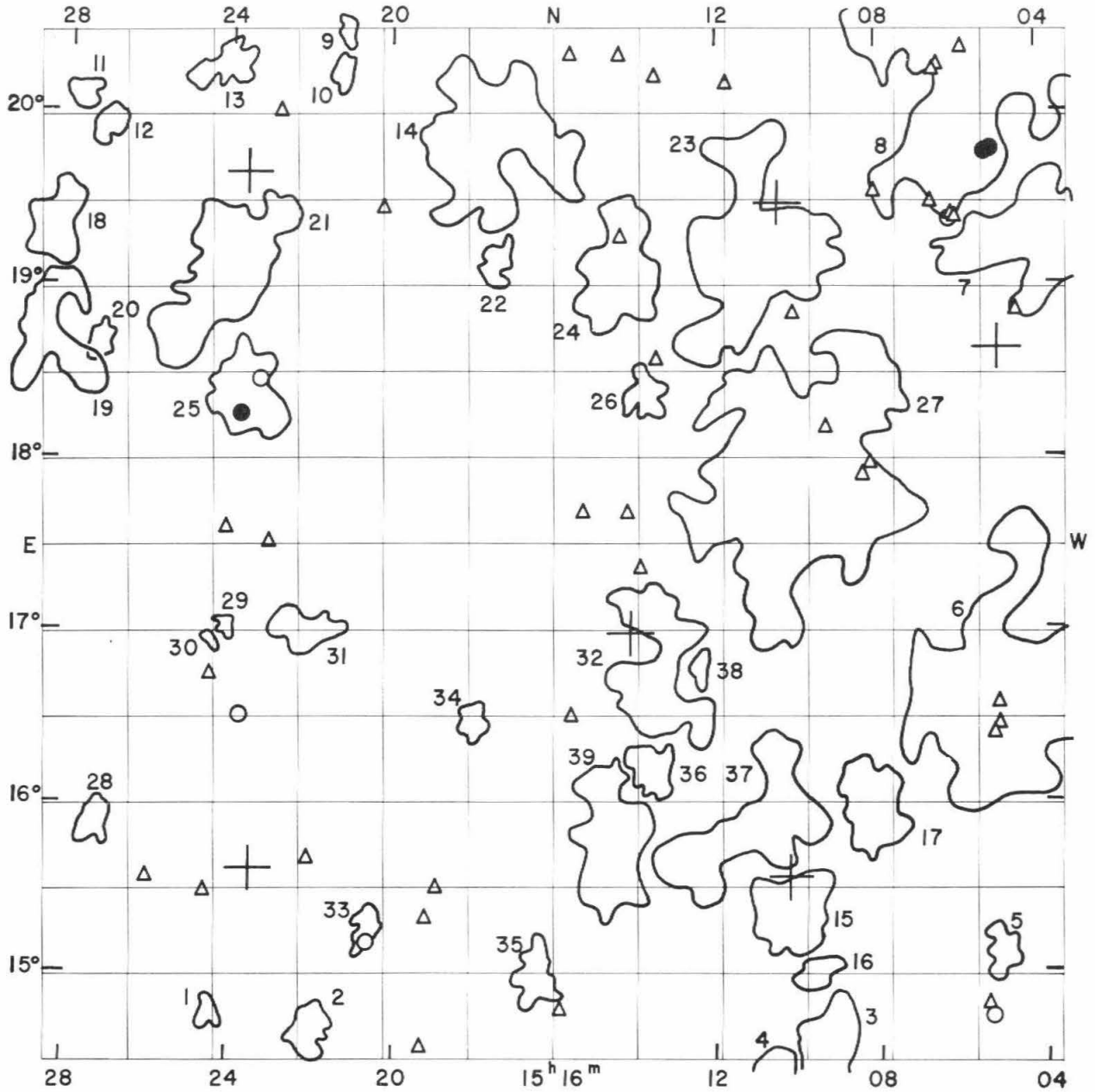
*Cluster No. 14 has a hole in the center; it is ring shaped.

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
14 39.3	+18 46	4486*	15.2		
14 39.4	+19 28		15.5		
14 39.5	+18 47	4487*	15.7		
14 40.0	+19 24	1047*	15.7		
14 40.4	+15 07		15.7		
14 40.8	+16 40		15.6		
14 40.8	+19 05	5737	14.6		
14 40.8	+19 43		15.2		double system
14 41.5	+16 41		15.3		
14 41.8	+15 47		15.6		
14 41.8	+18 14	1050*	15.1		
14 41.9	+19 14	1051*	15.4		
14 42.0	+15 45	4494*	15.2		
14 42.1	+15 42		15.5		compact
14 42.8	+17 58		15.3		
14 42.8	+19 39		15.3		compact
14 42.9	+16 02		15.6		
14 42.9	+17 36		15.4		
14 43.1	+19 41		15.1		double system, jets + bridges
14 43.3	+17 10	1053*	15.1		
14 43.6	+16 52		15.7		
14 44.0	+19 29		15.7		
14 44.2	+16 21	4503*	14.9		
14 44.3	+19 30		15.4		compact
14 44.8	+16 30		15.2		triple system
14 44.9	+19 04		15.4		double system
14 45.3	+18 40	4507*	15.7		
14 45.3	+18 43	5760	14.3		
14 45.5	+20 18		15.6		extremely compact
14 45.6	+19 16		15.1		multiple system, bridges
14 46.0	+18 34		15.5		double nucleus
14 46.4	+18 30		15.6		
14 46.5	+16 22		15.6		triple system
14 46.7	+16 56		15.1		
14 46.8	+17 14	1058*	14.8		
14 46.9	+16 51		15.4		compact
14 47.0	+16 56		15.7		
14 47.2	+16 52		15.5		
14 47.2	+17 24		15.7		
14 47.3	+18 54		15.6		double system
14 47.7	+17 15		15.7		
14 47.9	+16 55		15.3		
14 48.0	+16 57		15.2		
14 48.8	+17 24		15.0		
14 48.9	+15 39		15.6		
14 48.9	+16 54		15.4		
14 49.0	+18 53		15.3		quintuple system

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
14 49.1	+17 43		15.7		
14 49.8	+20 16		15.7		
14 50.0	+17 20		15.5		
14 50.1	+15 14		15.7		
14 50.1	+17 16		15.6		
14 50.3	+17 06		15.4		compact
14 50.5	+16 54		15.6		
14 50.5	+16 56		15.7		
14 50.6	+16 53		15.5		compact
14 50.8	+16 53		15.5		double nebula
14 50.8	+17 15		15.7		
14 50.9	+16 50		15.7		
14 51.2	+18 18		15.7		very diffuse spiral
14 51.4	+17 39		15.6		
14 51.4	+20 19		15.4		
14 51.5	+15 24		15.6		
14 52.0	+16 34		14.9		
14 52.0	+17 55		15.7		
14 52.1	+18 50	5778	15.6		system with long jets
14 52.3	+20 14		15.5		
14 52.4	+18 46		15.7		
14 52.5	+18 18	1075*	14.9		
14 52.6	+17 49		15.4		
14 52.6	+18 14	1076*	13.9		
14 52.7	+17 48		15.7		
14 52.8	+18 19		15.6		diffuse
14 52.9	+16 43		14.8		extremely compact
14 52.9	+16 45		15.5		
14 53.0	+19 02		15.6		compact
14 53.6	+18 15		15.7		compact
14 53.8	+19 57		15.7		
14 54.4	+14 36		15.4		
14 54.8	+17 23		15.7		
14 54.8	+19 54		14.7		
14 55.0	+19 52		14.0		
14 55.3	+15 28		15.6		
14 56.5	+14 39		15.7		
14 56.6	+16 36		15.5		
14 56.6	+20 15		15.5		
14 56.7	+19 47		15.7		diffuse
14 57.1	+16 50		14.5		
14 58.2	+16 22		15.1		double nebula
14 58.2	+17 45		15.7		
14 58.5	+17 09		15.3		compact
14 58.9	+16 58		15.7		
14 59.2	+16 55		15.4		very compact
14 59.3	+16 04		15.7		
14 59.5	+15 16		15.3		
15 00.0	+16 24		15.7		
15 00.4	+17 01		15.3		
15 00.4	+17 27	1085*	15.0		
15 00.5	+17 07		15.2		
15 01.1	+15 00		15.6		
15 01.1	+17 18	1086*	15.4		
15 01.2	+17 17		15.7		
15 02.1	+17 30		14.7		
15 02.1	+17 52		15.3		
15 02.1	+17 53		15.5		
15 02.3	+16 20		15.7		diffuse

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 02.4 +16 32		15.6		very compact
15 02.4 +19 14		15.6		
15 02.6 +16 30		15.7		
15 02.6 +16 32		15.7		
15 03.0 +14 37		15.1		
15 03.0 +16 35		15.5		compact
15 03.0 +16 36		15.7		
15 03.4 +14 45		15.6		
15 04.6 +18 51		15.3		double nebula



FIELD No. 106

15^h16^m $+17^\circ30'$

Survey Plate No. 91

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
20340	15 05 02.7	+ 18 38 02	6.00
20452	15 10 13.3	+ 15 33 46	8.9
20457	15 10 29.3	+ 19 28 06	6.8
20535	15 14 07.3	+ 16 58 47	7.6
20740	15 23 28.1	+ 15 36 09	5.46
20745	15 23 38.2	+ 19 39 19	6.29

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1459.8 + 2043	open	741	13.5	Near	8
1504.0 + 1915	open	101	4.1	MD	7
1504.6 + 1639	open	232	6.8	Near	6
1505.0 + 1506	compact	132	1.3	VD	5
1508.1 + 1558	open	68	2.7	D	17
1509.3 + 1434	medium compact	263	2.4	VD	3
1509.6 + 1500	compact	71	1.2	VD	16
1510.0 + 1753	medium compact	504	7.5	MD	27
1510.1 + 1521	medium compact	116	2.7	D	15
1510.7 + 1427	compact	121	1.5	D	4
1511.0 + 1912	medium compact	170	5.2	MD	23
1511.4 + 1549	medium compact	206	3.7	VD	37
1512.4 + 1646	compact	68	0.8	ED	38
1513.4 + 1646	open	161	3.6	VD	32
1513.6 + 1611	medium compact	178	1.7	ED	36
1513.7 + 1822	compact	107	1.4	ED	26
1514.3 + 1904	medium compact	108	3.4	D	24
1514.5 + 1545	open	98	3.5	MD	39
1516.4 + 1459	medium compact	71	1.7	VD	35
1517.4 + 1906	compact	104	1.2	VD	22
1517.5 + 1949	medium compact	182	4.7	MD	14
1518.0 + 1628	compact	79	1.1	ED	34
1520.6 + 1516	compact	70	1.1	ED	33
1521.1 + 2029	compact	51	0.7	ED	9
1521.2 + 2014	compact	70	0.9	ED	10
1522.0 + 1439	medium compact	94	1.4	D	2
1522.1 + 1659	medium compact	103	1.7	D	31
1523.6 + 1822	medium compact	89	2.7	VD	25
1524.0 + 1700	compact	51	0.6	ED	29
1524.1 + 1904	medium compact	204	4.0	MD	21
1524.2 + 2016	medium compact	102	1.7	VD	13
1524.4 + 1447	compact	59	0.8	VD	1
1524.4 + 1656	compact	40	0.4	ED	30
1527.1 + 1955	compact	89	1.1	VD	12
1527.2 + 1553	compact	75	1.2	ED	28
1527.2 + 1839	compact	84	1.0	ED	20
1527.8 + 2006	compact	68	1.0	ED	11
1528.4 + 1841	medium compact	112	3.0	D	19
1528.4 + 1920	medium compact	95	2.2	VD	18

Average number of galaxies per cluster = 136.8

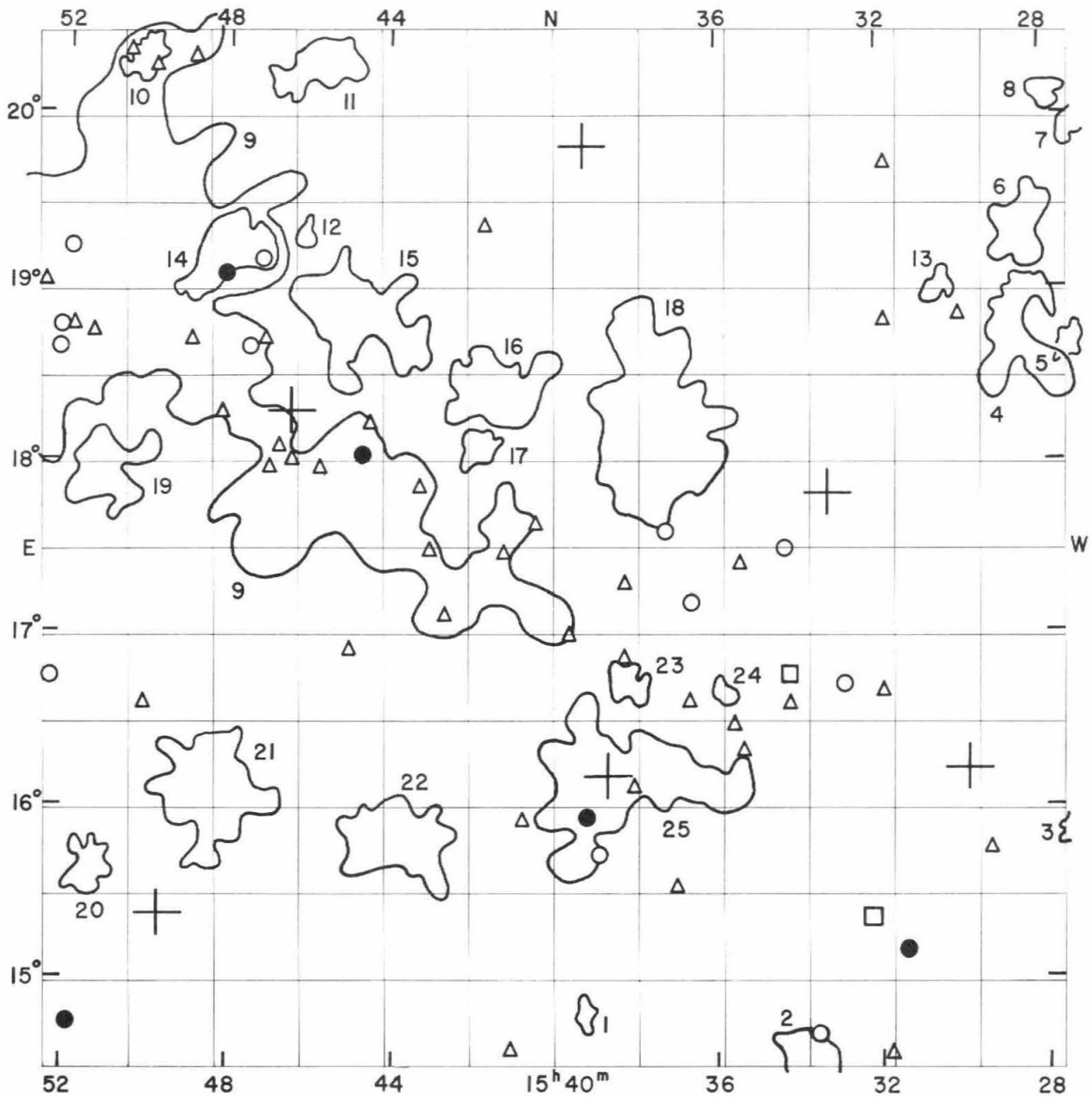
GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
15 04.6 +18 51		15.3		double nebula
15 05.0 +16 26		15.6		very compact
15 05.0 +16 34		15.7		diffuse
15 05.2 +16 23		15.6		
15 05.2 +19 47	5857	13.6	+4669	
15 05.3 +14 44	1093*	14.9		
15 05.3 +19 46	5859	13.1	+4664	
15 05.4 +14 49	1094*	15.2		triple system
15 05.9 +20 22		15.2		

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
15 06.0	+19 23		15.6		
15 06.1	+19 24	1096*	15.1		
15 06.2	+19 22	1097*	14.7		
15 06.5	+20 16		15.7		
15 06.6	+20 15		15.6		
15 06.7	+19 28		15.7		extremely diffuse
15 08.0	+19 32		15.5		double system
15 08.2	+17 57		15.7		double system
15 08.4	+17 53		15.7		
15 09.3	+18 10		15.5		
15 10.1	+18 50		15.2		
15 11.8	+20 10		15.5		double system
15 13.5	+18 34		15.7		
15 13.5	+20 12		15.6		
15 13.8	+17 20		15.3		
15 14.2	+17 40		15.6		
15 14.3	+19 16		15.1		
15 14.4	+20 20		15.7		very compact
15 15.3	+17 40		15.7		
15 15.6	+16 30		15.7		extremely diffuse
15 15.6	+20 20		15.6		
15 15.8	+14 46		15.4		
15 18.9	+15 29		15.3		
15 19.1	+15 19		15.1		
15 19.2	+14 34		15.7		
15 20.2	+19 26		15.7		
15 20.6	+15 11		15.0		
15 22.0	+15 40	1117*	15.6		
15 22.8	+20 00		15.3		
15 23.0	+17 30		15.7		
15 23.2	+18 27		14.6		
15 23.7	+16 30		14.7		
15 23.7	+18 15	5928	13.8		
15 24.1	+17 35		15.7		
15 24.5	+15 28		15.3		
15 24.5	+16 44		15.4		compact
15 25.9	+15 33		15.5		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5857	-	-	13.83	Sb	13.9	Sb	-	-
5859	-	-	13.28	Sb	13.2	Sb	-	-



FIELD No. 107

15^h40^m $+17^\circ30'$

Survey Plate No. 82

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
20880	15 29 51.3	+ 16 13 28	6.14
20962	15 33 16.9	+ 17 49 15	6.06
21089	15 38 41.1	+ 16 11 05	5.97
21102	15 39 19.2	+ 19 49 48	4.49
21255	15 46 29.2	+ 18 17 41	4.28
21321	15 49 42.5	+ 15 23 10	7.27

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1527.1 + 1955	compact	89	1.1	VD	7
1527.2 + 1553	compact	75	1.2	ED	3
1527.2 + 1839	compact	84	1.0	ED	5
1527.8 + 2006	compact	68	1.0	ED	8
1528.4 + 1841	medium compact	112	3.0	D	4
1528.4 + 1920	medium compact	95	2.2	VD	6
1530.5 + 1900	compact	77	1.0	VD	13
1533.8 + 1430	medium compact	117	2.0	MD	2
1535.9 + 1640	compact	56	0.8	ED	24
1537.5 + 1813	compact	181	5.1	MD	18
1538.1 + 1643	medium compact	75	1.3	VD	23
1538.5 + 1609	open	115	4.8	MD	25
1539.2 + 1448	medium compact	52	0.8	VD	1
1541.3 + 1825	open	84	3.0	D	16
1541.8 + 1804	compact	88	1.2	VD	17
1543.9 + 1549	medium compact	95	3.1	D	22
1544.8 + 1850	open	105	3.6	MD	15
1545.8 + 2017	medium compact	106	2.1	VD	11
1546.1 + 1918	compact	58	0.7	ED	12
1548.0 + 1914	compact	140	2.4	VD	14
1548.3 + 1604	medium compact	106	3.5	D	21
1550.1 + 2019	compact	88	1.2	VD	10
1551.0 + 1755	compact	87	2.3	D	19
1551.4 + 1539	medium compact	56	1.6	VD	20
1600.4 + 1925	medium compact	2859	33.8	Near	9*

Average number of galaxies per cluster = 202.7

*Cluster No. 9 contains the conventional Hercules Cluster as one of its condensations.

GALAXIES

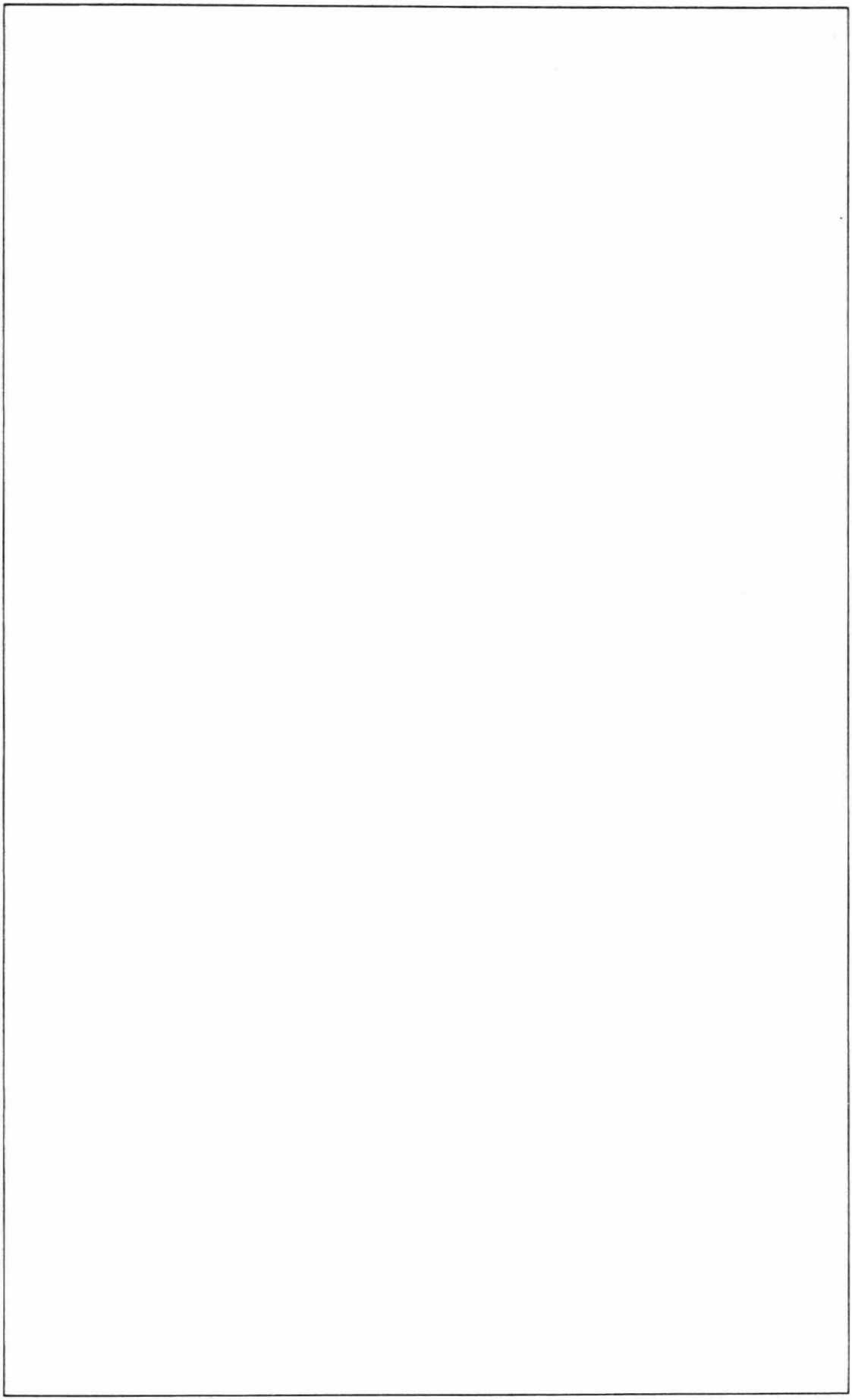
Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
15 29.3	+ 15 45		15.3		diffuse
15 30.0	+ 18 50		15.5		
15 31.4	+ 15 10	5951	13.8		
15 31.8	+ 14 34		15.2		extremely diffuse
15 31.8	+ 18 49		15.7		
15 31.8	+ 19 44		15.7		
15 31.9	+ 16 40		15.6		double system
15 32.2	+ 15 21	5953+5954	12.7*)		double system, tidal effects
15 32.8	+ 16 43		15.0		
15 33.5	+ 14 41		14.7		
15 34.2	+ 16 36		15.4		diffuse
15 34.2	+ 16 46	5962	12.2	+ 1993	m_H = 12.5 S
15 34.3	+ 17 30		15.0		
15 35.3	+ 16 20		15.7		
15 35.4	+ 17 25	1130*	15.5		
15 35.5	+ 16 29		15.6		
15 36.6	+ 16 37		15.3		
15 36.6	+ 17 12	5972	14.8		
15 37.0	+ 15 33		15.7		
15 37.2	+ 17 35		15.0		

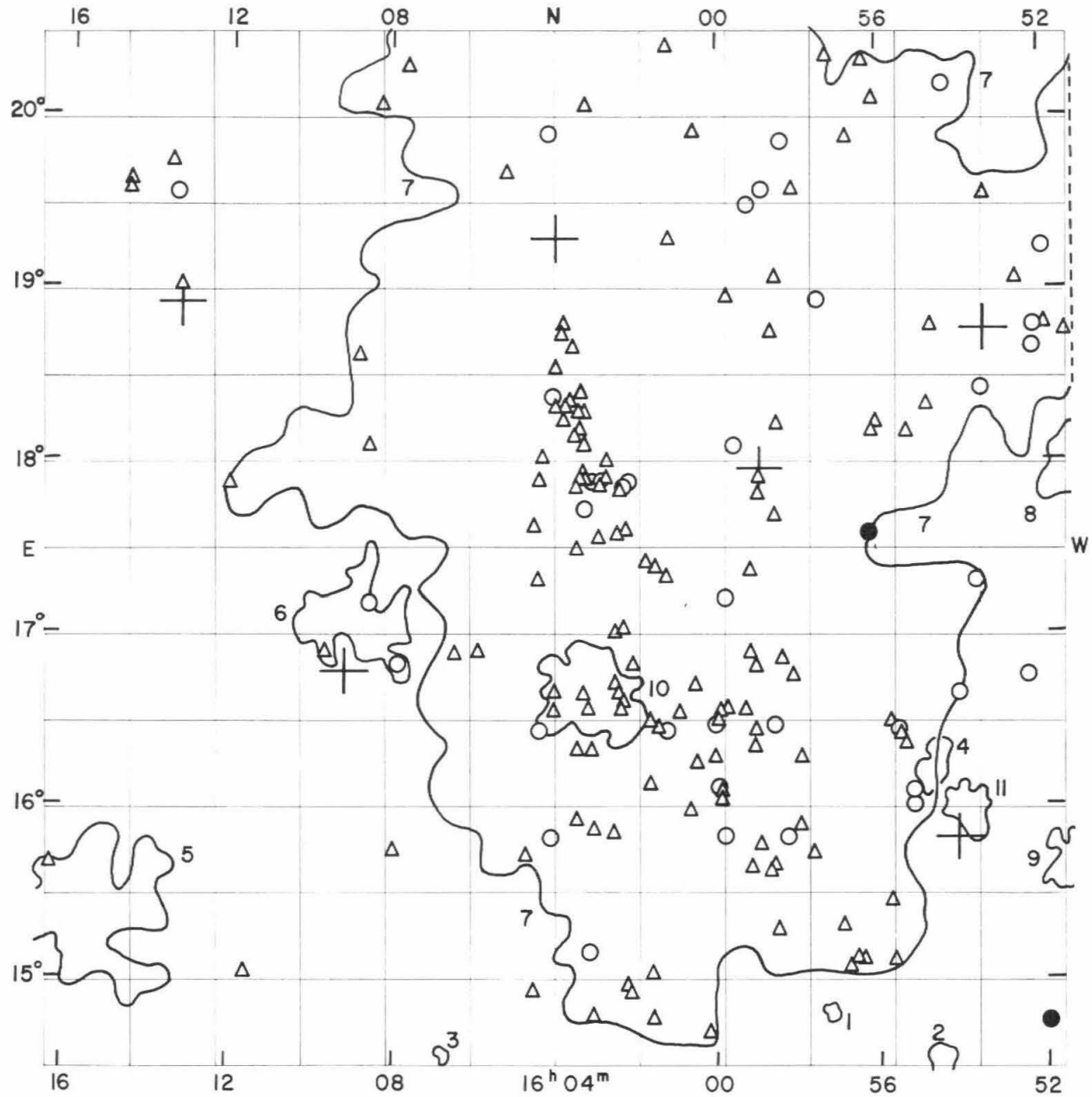
Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
15 38.0	+16 08		15.5		triple system
15 38.2	+16 52		15.6		
15 38.2	+17 17	5977	15.1		
15 38.9	+15 44	1133*	14.8		
15 39.1	+15 57	5980	13.3		
15 39.6	+17 00		15.3		
15 40.4	+17 38		15.7		
15 40.8	+15 55		15.4		
15 41.0	+14 36		15.1		
15 41.2	+17 28		15.5		
15 41.7	+19 22		15.5		
15 42.7	+17 07	1134*	15.2		double system
15 43.0	+17 29		15.6		
15 43.3	+17 51	1135*	15.1		
15 44.5	+18 13		15.6		
15 44.7	+18 02	5996	13.2		double system
15 45.0	+16 55		15.3		
15 45.8	+17 58		15.5		
15 46.4	+18 01		15.3		
15 46.7	+18 06		15.7		
15 46.9	+17 58		15.3		
15 47.0	+18 43		15.5		
15 47.1	+19 11	6003	14.4		
15 47.4	+18 41		14.6		
15 48.1	+18 17	1142*	15.1		
15 48.1	+19 05	6004	13.4		
15 48.8	+20 20		15.7		
15 48.9	+18 43		15.2		
15 49.8	+20 17		15.5		
15 50.0	+16 36		15.4		
15 50.5	+20 22		15.7		
15 51.3	+18 45		15.6		
15 51.8	+18 47		15.1		
15 51.9	+14 44	6012	13.1		
15 51.9	+19 15		15.0		
15 52.1	+18 47		14.8		
15 52.2	+18 40		14.7		
15 52.3	+16 45		14.5		
15 52.6	+19 03		15.4		

*) NGC 5953 m_p = 13.3 NGC 5954 m_p = 13.7

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5962	12.2	Sc	12.15	Sc	12.1	Sc	-	-





FIELD NO. 108

16^h04^m $+17^\circ30'$

Survey Plate No. 83

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
21390	15 53 25.4	+ 18 45 56	6.22
21408	15 54 08.5	+ 15 49 24	3.86
21525	15 58 59.4	+ 17 57 18	5.28
21648	16 04 02.1	+ 19 18 15	9.2
21777	16 09 12.8	+ 16 47 37	5.90
21870	16 13 15.6	+ 18 55 59	5.86

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1551.0 + 1755	compact	87	2.3	D	8
1551.4 + 1539	medium compact	56	1.6	VD	9
1553.9 + 1559	medium compact	60	1.5	VD	11
1554.5 + 1429	medium compact	70	1.3	VD	2
1554.8 + 1613	compact	57	1.3	VD	4
1557.1 + 1448	medium compact	31	0.5	ED	1
1600.4 + 1925	medium compact	2859	33.8	Near	7*
1603.0 + 1639	compact	194	2.8	D	10
1606.8 + 1434	compact	39	0.5	ED	3
1608.9 + 1705	compact	131	2.9	MD	6
1615.2 + 1524	open	104	3.7	MD	5

Average number of galaxies per cluster = 335.3

*Cluster No. 7 contains the conventional Hercules Cluster as one of its condensations.

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 51.3 + 18 45		15.6		
15 51.8 + 18 47		15.1		
15 51.9 + 14 44	6012	13.1		
15 51.9 + 19 15		15.0		
15 52.1 + 18 47		14.8		
15 52.2 + 18 40		14.7		
15 52.3 + 16 45		14.5		
15 52.6 + 19 03		15.4		
15 53.3 + 19 33		15.7		
15 53.4 + 18 25		14.7		
15 53.6 + 17 18		15.0		diffuse spiral
15 54.1 + 16 40		14.7		
15 54.3 + 20 11		14.9		
15 54.7 + 18 47		15.5		double system
15 54.8 + 18 19		15.2		
15 55.2 + 16 00	6018	14.6		
15 55.2 + 16 05	6021	14.1		
15 55.3 + 18 10		15.3		
15 55.4 + 16 21		15.7		compact
15 55.5 + 16 25	6022	15.2		
15 55.5 + 16 27	6023	14.7		
15 55.7 + 15 05		15.6		
15 55.7 + 16 29		15.3		
15 55.8 + 15 27		15.6		
15 56.0 + 18 14		15.6		
15 56.0 + 20 06		15.2		
15 56.1 + 18 11		15.7		
15 56.2 + 17 35	1151*	13.4		
15 56.3 + 20 19		15.7		
15 56.5 + 15 05		15.1		
15 56.6 + 15 06		15.6		
15 56.7 + 19 53		15.6		
15 56.8 + 15 03		15.4		
15 57.0 + 15 18		15.3		

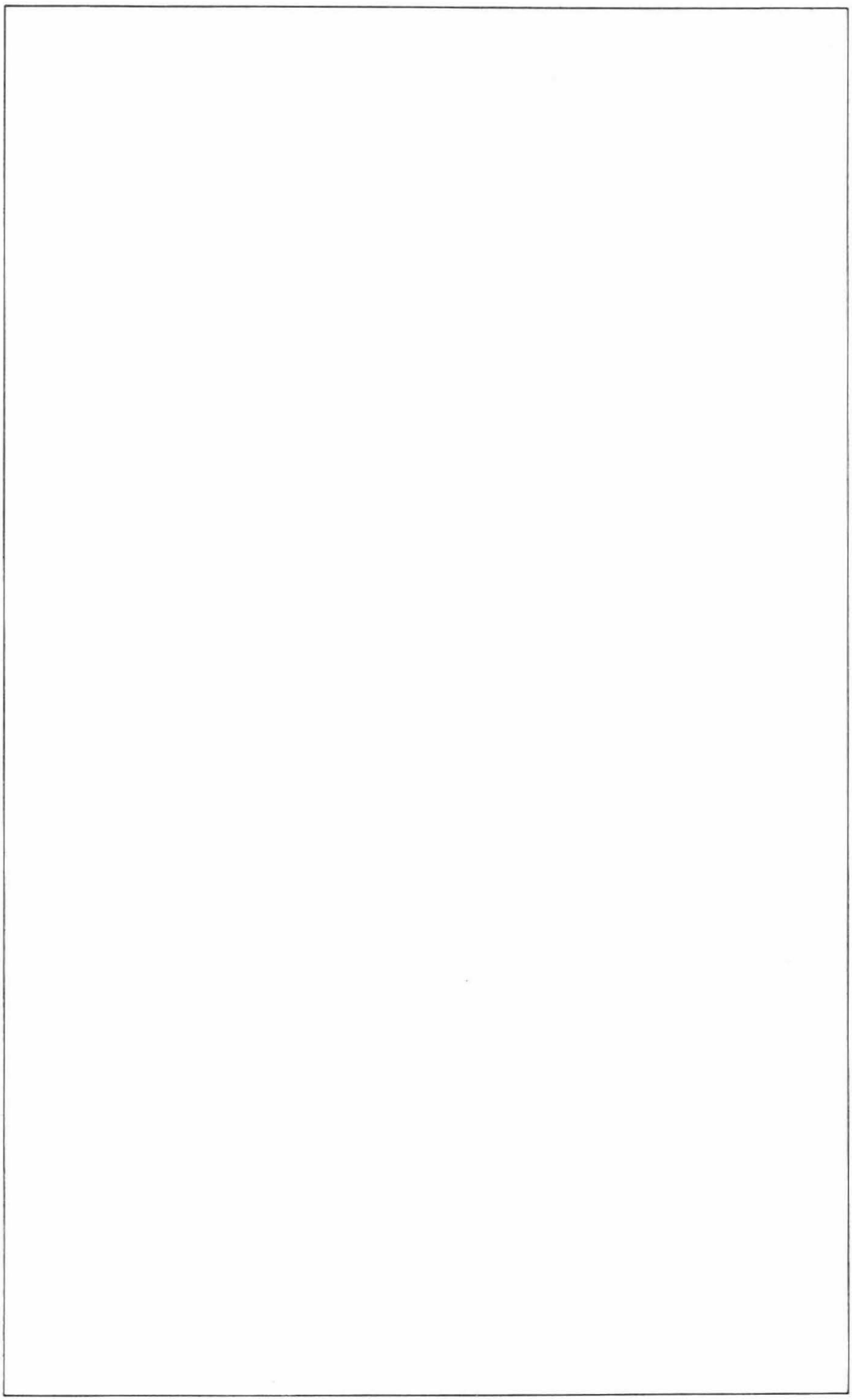
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 57.2 +20 21		15.7		
15 57.5 +18 56		14.6		
15 57.6 +15 44		15.6		
15 58.0 +15 54		15.6		
15 58.0 +16 17		15.6		double system
15 58.1 +19 35		15.7		
15 58.2 +16 46		15.7		
15 58.3 +15 50	1155*	14.9		
15 58.4 +16 51		15.4		
15 58.4 +19 52	1156*	14.9		
15 58.5 +15 17		15.4		
15 58.5 +18 13		15.5		diffuse
15 58.6 +15 40	1157*	15.7		
15 58.6 +16 28		15.0		double system
15 58.6 +17 41		15.4		
15 58.6 +19 04		15.6		
15 58.7 +15 38	1160*	15.7		
15 58.7 +18 45		15.7		
15 58.8 +19 35		15.0		
15 59.0 +15 47	1161*	15.2		
15 59.0 +16 27		15.2		
15 59.0 +17 49	1162*	15.2		
15 59.0 +17 54		15.6		
15 59.1 +16 21		15.3		
15 59.1 +16 49		15.2		compact
15 59.2 +15 38	1163*	15.3		
15 59.2 +16 53		15.4		
15 59.2 +17 23		15.5		compact
15 59.2 +19 29	6028	14.8		
15 59.3 +16 34		15.6		
15 59.6 +18 06	6030	14.5		
15 59.7 +16 35		15.7		
15 59.8 +15 50		14.6		double nebula
15 59.8 +17 13		14.9		
15 59.8 +18 57		15.2		
15 59.9 +16 02		15.5		
15 59.9 +16 04		15.3		
15 59.9 +16 34		15.4		
16 00.0 +16 06		14.9		
16 00.0 +16 17		15.6		
16 00.0 +16 29		14.6		
16 00.0 +16 30		15.7		
16 00.2 +14 42		15.7		
16 00.4 +16 15		15.5		
16 00.6 +16 42		15.4		
16 00.6 +19 56		15.7		compact
16 00.7 +15 59		15.1		
16 01.0 +16 32		15.5		compact
16 01.2 +16 28		14.8		
16 01.2 +17 20	6034	15.2		
16 01.2 +19 18		15.5		double system
16 01.3 +20 25		15.6		compact
16 01.4 +16 28		15.5		double system
16 01.5 +17 23		15.4		
16 01.6 +14 46		15.7		diffuse spiral
16 01.6 +15 02	1168*	15.6		double system
16 01.6 +16 08		15.6		
16 01.6 +16 30		15.6		
16 01.8 +17 25		15.7		compact

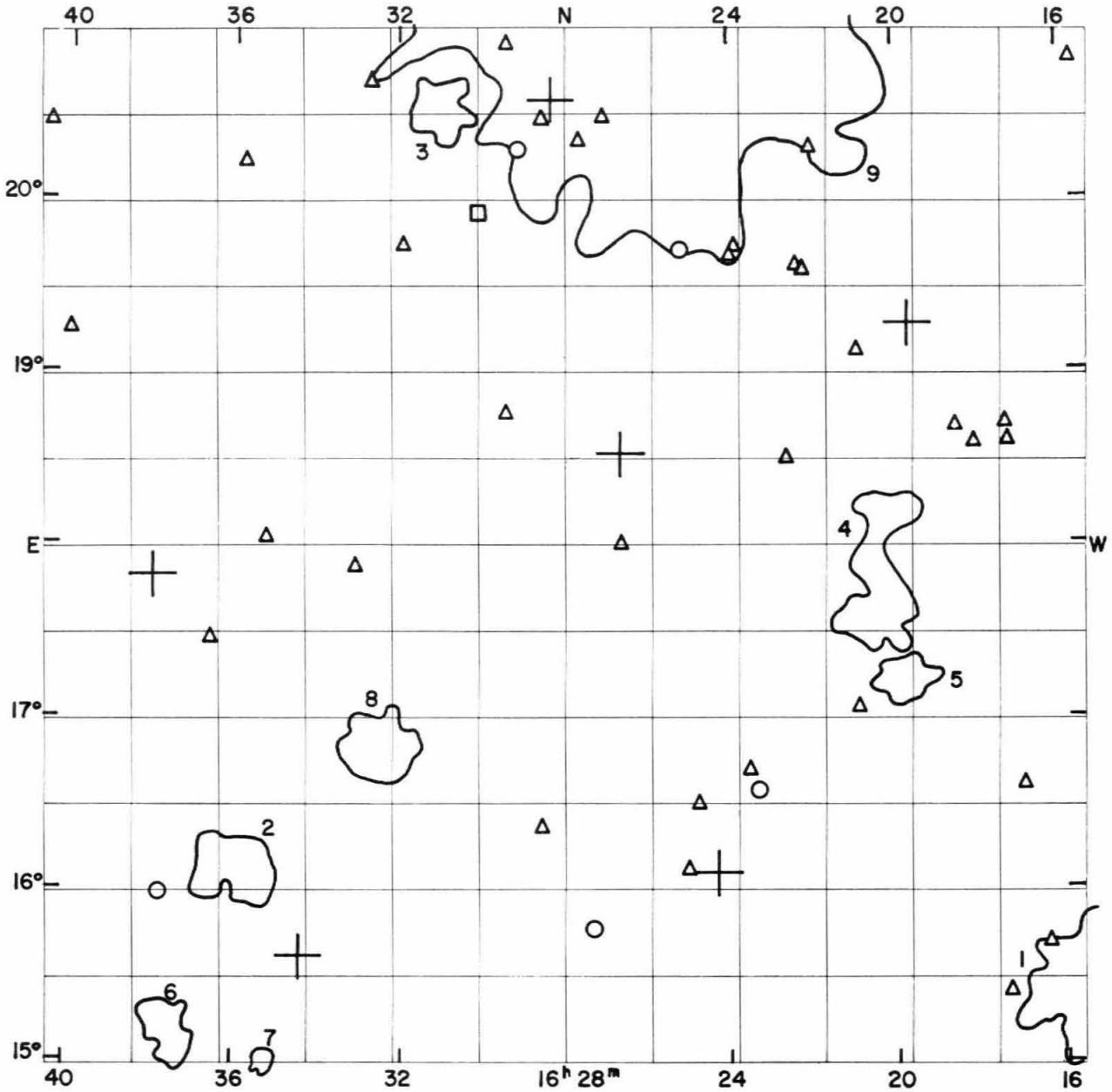
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 02.1	+ 14 55		15.5		
16 02.1	+ 16 50		15.6		
16 02.1	+ 17 53	6040	14.6		double system
16 02.2	+ 14 57		15.2		
16 02.2	+ 17 36		15.7		
16 02.3	+ 16 37		15.5		double system
16 02.3	+ 17 01		15.3		
16 02.3	+ 17 51	6041+1170*	14.9	+10469	triple system
16 02.4	+ 16 34		15.7		
16 02.4	+ 16 40		15.6		double system
16 02.4	+ 17 50	6042	15.6		compact
16 02.5	+ 15 52		15.6		
16 02.5	+ 16 43		15.1		compact
16 02.5	+ 17 01		15.7		
16 02.5	+ 17 35		15.7		
16 02.7	+ 17 55	6043	15.4		
16 02.7	+ 18 00	1172*	15.3		
16 02.8	+ 17 52	6047	15.4	+ 9470	
16 02.8	+ 17 54	6045	14.8	+ 9935	
16 02.9	+ 17 33	1173*	15.6		
16 03.0	+ 15 53		15.7		
16 03.1	+ 14 46		15.2		
16 03.1	+ 15 10	1174*	14.5		
16 03.1	+ 16 20		15.3		compact
16 03.1	+ 17 54	6050+1179*	14.9		twin spirals in contact
16 03.2	+ 16 35		15.4		double system
16 03.2	+ 17 44	1178*+1181*	15.0		double system
16 03.2	+ 17 55	6054	15.7		
16 03.2	+ 18 06	1176*	15.1		
16 03.2	+ 18 17	6055	15.4		
16 03.2	+ 20 04		15.2		double system
16 03.3	+ 16 40		15.6		double nebula
16 03.3	+ 17 56	1182*	15.2		system with jet
16 03.3	+ 18 25		15.6		
16 03.4	+ 17 55	1184*	15.6		
16 03.4	+ 18 12		15.7		
16 03.4	+ 18 18	6057	15.7		compact
16 03.5	+ 15 55		15.5		
16 03.5	+ 16 20		15.5		double system
16 03.5	+ 17 29		15.4		
16 03.5	+ 17 51	1185*	15.1	+10452	
16 03.5	+ 18 09		15.7		
16 03.6	+ 18 21		15.7		
16 03.6	+ 18 40		15.7		very compact
16 03.8	+ 18 15		15.7		diffuse
16 03.8	+ 18 20		15.7		
16 03.8	+ 18 49		15.7		
16 03.9	+ 18 45		15.6		very compact
16 04.0	+ 16 34		15.6		compact
16 04.0	+ 16 40		15.7		
16 04.0	+ 18 19	1189*	15.5		
16 04.0	+ 18 23	6061	15.0		
16 04.0	+ 18 33		15.7		
16 04.1	+ 15 49		14.3		double system
16 04.1	+ 19 55	6062	14.4		double system
16 04.3	+ 18 01		15.7		
16 04.4	+ 16 27		14.3		
16 04.4	+ 17 19	1195*	15.4		
16 04.4	+ 17 54	1194*	15.5	+11642	compact

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
16 04.5	+14 56		15.4		
16 04.5	+17 38		15.7		
16 04.7	+15 44		15.3		
16 05.2	+19 41		15.7		diffuse
16 05.9	+16 54		15.7		
16 06.5	+16 54		15.4		
16 07.6	+20 18		15.7		
16 07.9	+16 50	6073	14.5		
16 08.0	+15 45		15.5		
16 08.2	+20 05		15.4		
16 08.6	+17 11		15.0		
16 08.6	+18 06		15.4		
16 08.8	+18 38		15.5		diffuse
16 09.6	+16 54		15.6		
16 11.6	+15 03		15.7		
16 12.0	+17 53	6084	15.4		
16 13.2	+19 01		15.1		
16 13.4	+19 35	6098+6099	14.6		double system
16 13.5	+19 46		15.6		
16 14.6	+19 36		15.7		
16 14.6	+19 39		15.5		
16 16.4	+15 40	1209*	15.1		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6041	-	-	-	-	-	S0	-	-
6045	-	-	-	-	-	Sb	-	-
6047	-	-	-	-	-	E0	-	-
1185*	-	-	14.77	Sa	14.8	Sa	-	-
1194*	-	-	15.34	E1	15.4	E1	-	-





FIELD No. 109

16^h28^m $+18^\circ00'$

Survey Plate No. 55

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
22012	16 19 42.8	+ 19 16 09	3.79
22127	16 24 23.0	+ 16 05 01	6.77
22166	16 26 40.7	+ 18 31 04	7.04
22202	16 28 23.2	+ 20 35 14	5.29
22335	16 34 26.6	+ 15 35 54	6.29
22426	16 37 58.5	+ 17 48 12	7.42

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1615.2 + 1524	open	104	3.7	MD	1
1619.8 + 1712	medium compact	55	1.7	VD	5
1620.4 + 1747	medium compact	81	3.4	MD	4
1626.2 + 2045	open	324	11.0	Near	9
1631.1 + 2031	medium compact	75	2.0	D	3
1632.5 + 1649	medium compact	66	2.2	VD	8
1635.2 + 1500	compact	55	0.7	ED	7
1635.9 + 1608	open	62	2.3	D	2
1637.5 + 1510	medium compact	52	1.7	VD	6

Average number of galaxies per cluster = 97.1

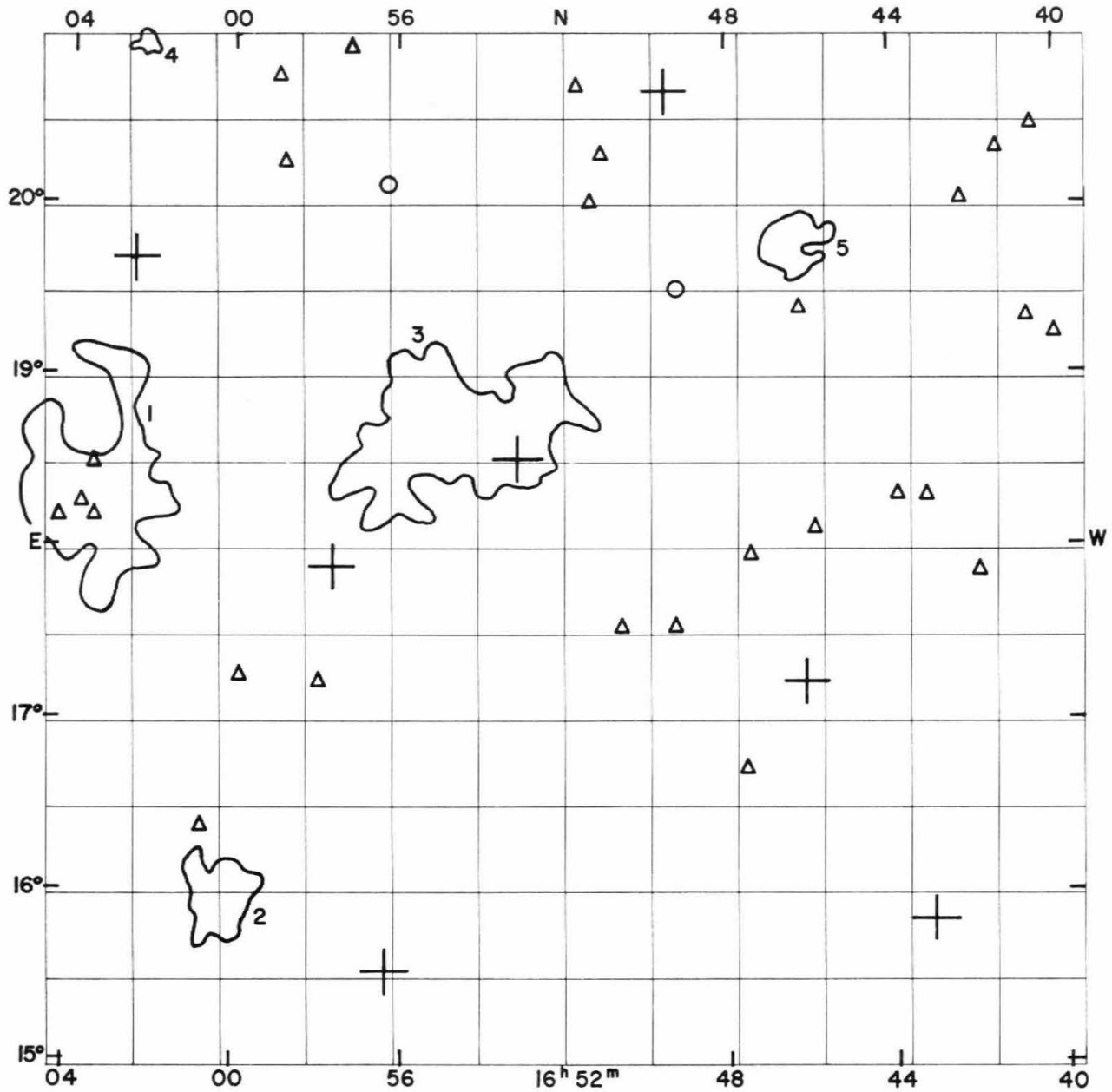
GALAXIES

Position α 1950 h m	Position δ 1950 o ′	NGC IC*	m_p	V_s km/sec	Remarks
16 15.7	+ 20 49		15.7		diffuse
16 16.4	+ 15 40	1209*	15.1		
16 16.9	+ 16 36		15.5		
16 17.3	+ 15 23		15.4		compact
16 17.3	+ 18 36		15.5		
16 17.4	+ 18 42		15.7		
16 18.1	+ 18 35		15.5		compact
16 18.5	+ 18 41		15.7		double system in contact
16 20.9	+ 17 03		15.1		
16 20.9	+ 19 06		15.3		double system
16 22.0	+ 20 17		15.2		
16 22.2	+ 19 35	1219*	15.4		
16 22.4	+ 19 36		15.4		
16 22.6	+ 18 30		15.3		
16 23.4	+ 16 35		14.9		
16 23.6	+ 16 41		15.5		
16 23.9	+ 19 44		15.7		
16 24.0	+ 19 40		15.6		
16 24.8	+ 16 30		15.1		
16 25.1	+ 16 06		15.7		
16 25.2	+ 19 42	6149	14.8		
16 26.6	+ 18 00		15.2		
16 27.0	+ 20 28		15.6		
16 27.3	+ 15 46		15.0		
16 27.7	+ 20 20		15.5		compact
16 28.6	+ 16 21		15.5		
16 28.6	+ 20 27		15.1		
16 29.2	+ 20 17		14.7		
16 29.5	+ 18 45		15.7		diffuse
16 29.5	+ 20 55		15.6		compact
16 30.1	+ 19 56	6181	12.7	+ 2158	m_H = 12.6 Sc
16 32.0	+ 19 45		15.5		double system, connected
16 32.8	+ 20 41		15.6		
16 33.1	+ 17 52		15.5		compact
16 35.3	+ 18 02		15.5		diffuse
16 35.8	+ 20 13		15.7		
16 36.6	+ 17 27		15.3		diffuse
16 37.8	+ 15 59		14.8		
16 40.0	+ 19 15		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 40.5 +20 27		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6181	12.0	Sc	12.45	Sc	12.3	Sc	-	-



FIELD No. 110

16^h52^m $+18^\circ00'$

Survey Plate No. 122

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
22553	16 43 06.5	+ 15 50 10	5.78
22621	16 46 10.0	+ 17 13 10	7.26
22705	16 49 35.8	+ 20 39 22	7.18
22816	16 53 10.2	+ 18 30 42	5.56
22888	16 56 22.0	+ 15 31 39	6.96
22921	16 57 38.3	+ 17 52 46	7.30
23046	17 02 30.6	+ 19 40 00	6.13

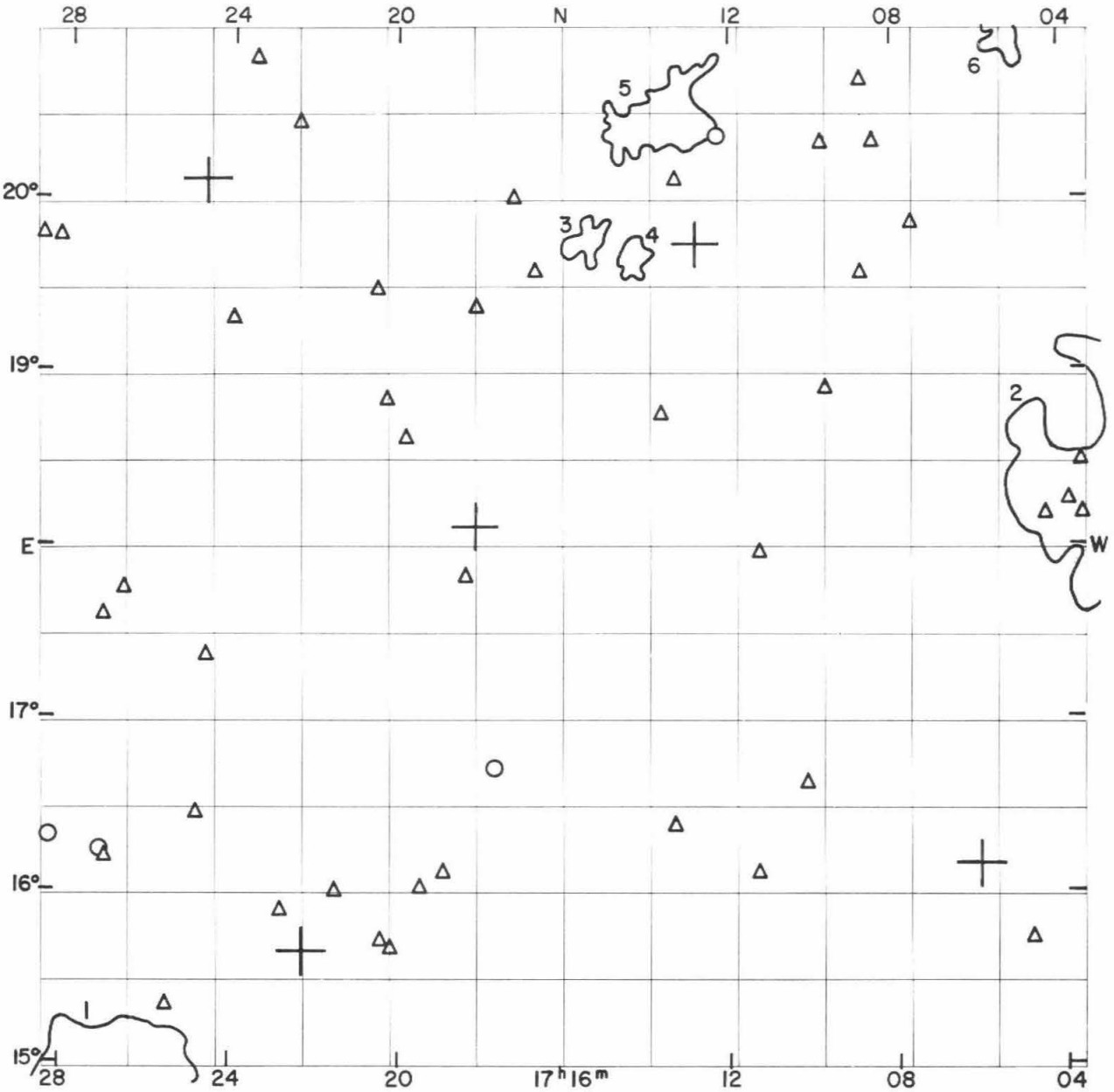
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1646.5 + 1945	open	66	2.1	VD	5
1654.6 + 1841	medium compact	120	5.7	MD	3
1700.3 + 1556	compact	59	2.3	D	2
1702.3 + 2055	compact	49	0.8	VD	4
1703.4 + 1816	medium compact	97	5.2	Near	1

Average number of galaxies per cluster = 78.2

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 40.0 +19 15		15.7		
16 40.5 +20 27		15.7		
16 40.8 +19 21	1224*	15.5		compact
16 41.4 +20 19		15.7		
16 42.0 +17 51	4619*	15.2		
16 42.3 +20 01		15.4		very compact
16 43.2 +18 18		15.3		double system
16 43.9 +18 18		15.4		
16 45.9 +18 07		15.6		diffuse
16 46.3 +19 23		15.6		diffuse
16 47.5 +17 57		15.1		
16 47.6 +16 43		15.7		very diffuse
16 49.3 +17 32	4624*	15.7		diffuse
16 49.3 +19 30		14.8		
16 50.6 +17 31		15.4		double system
16 51.0 +20 17		15.7		
16 51.4 +20 00		15.5		
16 51.7 +20 40		15.6		diffuse
16 56.3 +20 07	1236*	14.6		
16 57.2 +20 55		15.7		
16 58.0 +17 14		15.7		
16 58.8 +20 15		15.6		compact
16 58.9 +20 45		15.3		
16 59.9 +17 15		15.7		
17 00.8 +16 22		15.6		double system
17 03.5 +18 10		15.5		
17 03.5 +18 29		15.5		
17 03.8 +18 15		15.6		compact
17 04.4 +18 10		15.7		



FIELD No. 111

17^h16^m $+18^\circ00'$

Survey Plate No. 1127

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
23125	17 06 00.9	+ 16 09 27	6.67
23289	17 12 47.1	+ 19 44 27	7.35
23426	17 18 06.5	+ 18 06 25	5.17
23559	17 22 18.4	+ 15 39 01	6.25
23641	17 24 39.5	+ 20 07 20	5.42

CLUSTERS OF GALAXIES

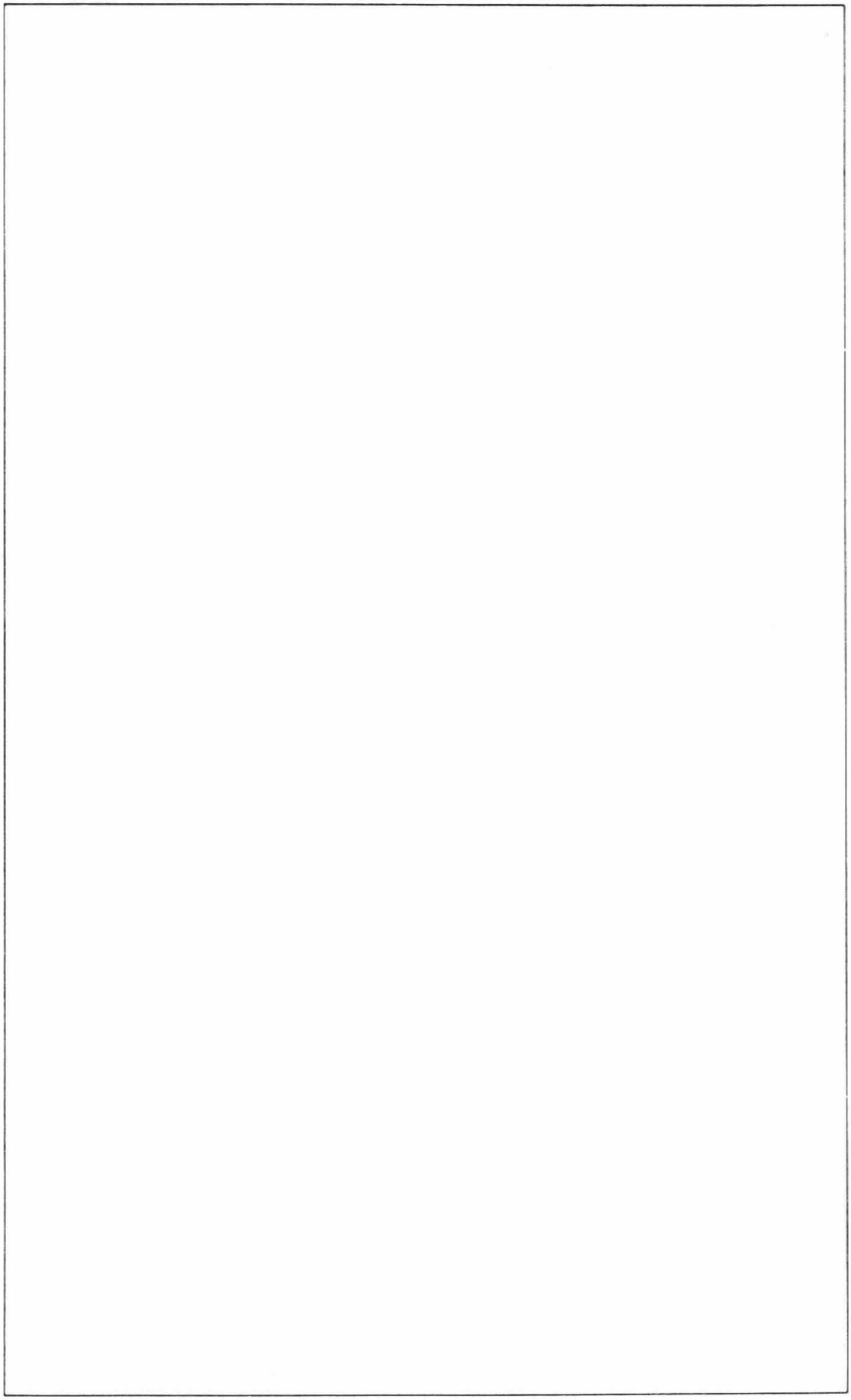
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1703.4 + 1816	medium compact	97	5.2	Near	2
1705.3 + 2055	medium compact	88	1.2	ED	6
1713.7 + 2027	medium compact	98	2.7	D	5
1714.3 + 1939	compact	81	1.1	ED	4
1715.5 + 1944	compact	146	1.2	VD	3
1726.8 + 1458	open	128	4.0	MD	1

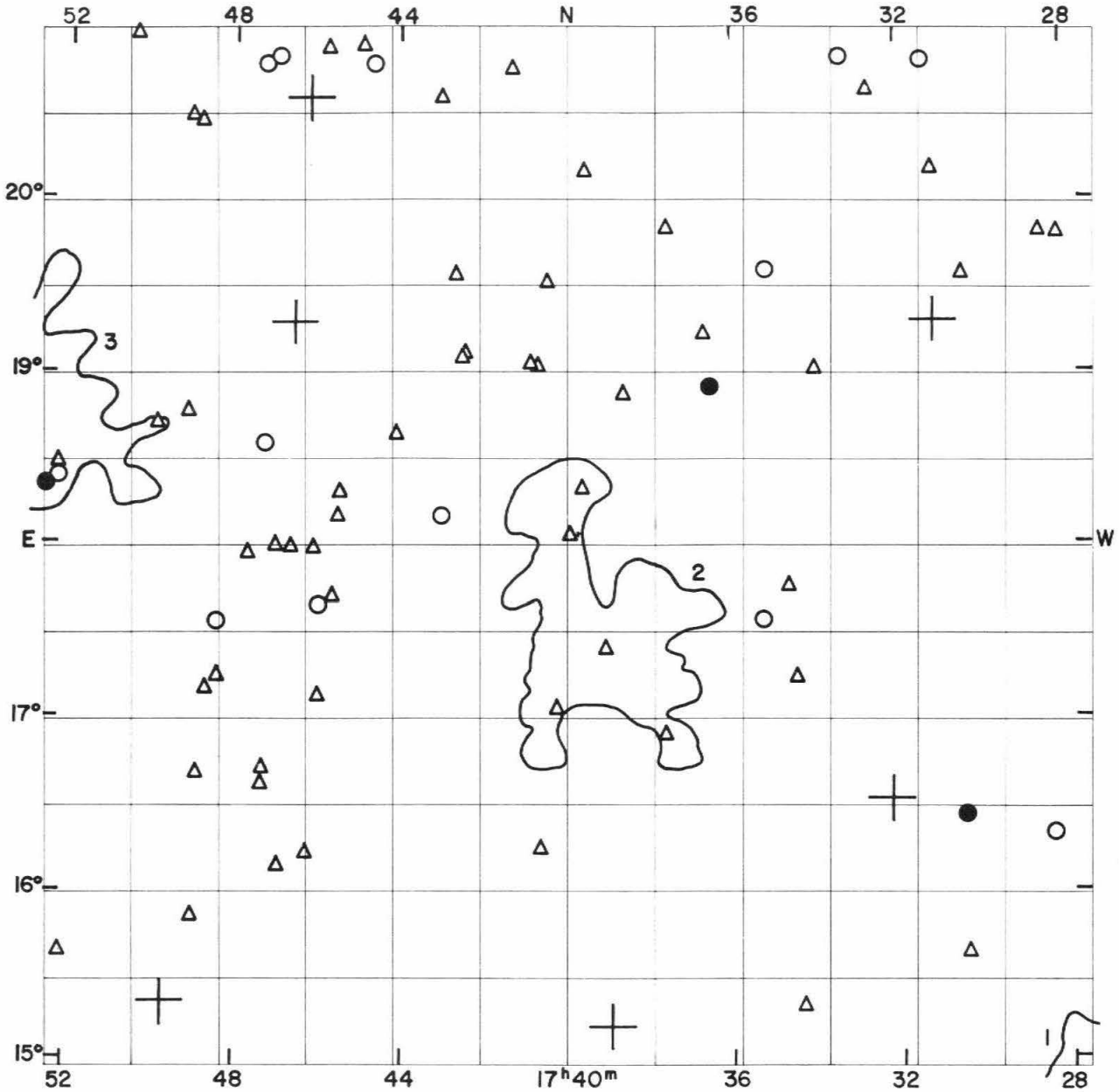
Average number of galaxies per cluster = 106.3

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
17 03.5 +18 10		15.5		
17 03.5 +18 29		15.5		
17 03.8 +18 15		15.6		compact
17 04.4 +18 10		15.7		
17 04.8 +15 43		15.6		
17 07.6 +19 51		15.6		
17 08.5 +20 19		15.3		
17 08.8 +19 33		15.7		
17 08.8 +20 41		15.7		
17 09.7 +18 54		15.5		compact
17 09.8 +20 19		15.4		
17 10.1 +16 37		15.5		
17 11.2 +17 57		15.7		
17 11.3 +16 06		15.1		double nebula
17 12.3 +20 22	6321	14.5		
17 13.3 +16 22		15.1		
17 13.3 +20 06		15.6		
17 13.6 +18 45		15.7		
17 16.7 +19 34		15.4		
17 17.2 +20 00		15.7		double system
17 17.7 +16 43	6347	14.6		
17 18.1 +19 22		15.3		
17 18.3 +17 49		15.6		
17 18.9 +16 06		15.4		
17 19.5 +16 01		15.6		double system
17 19.8 +18 37		15.2		
17 20.2 +15 40		15.7		
17 20.3 +18 50		15.5		
17 20.4 +15 43		15.7		double nebula
17 20.5 +19 28		15.6		
17 21.6 +16 01		15.4		double system
17 22.4 +20 26		15.3		
17 22.8 +15 54		15.7		
17 23.5 +20 49		15.1		
17 24.0 +19 19		15.6		extremely compact
17 24.6 +17 22		15.6		
17 24.8 +16 27		15.5		
17 25.5 +15 20		15.7		
17 26.6 +17 44		15.5		
17 27.0 +16 12		15.2		
17 27.0 +17 35		15.6		
17 27.1 +16 14	6375	14.5		double system

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
17 28.1 +19 47		15.6		very compact
17 28.4 +16 19	6379	14.6		
17 28.6 +19 48		15.4		





FIELD No. 112

17^h40^m $+18^\circ00'$

Survey Plate No. 274

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
23798	17 31 12.3	+ 19 17 29	5.59
23822	17 32 13.1	+ 16 32 11	6.40
23986	17 38 55.3	+ 15 12 09	6.26
24184	17 46 15.9	+ 20 34 50	5.77
24194	17 46 37.4	+ 19 16 11	6.04
24281	17 49 43.0	+ 15 20 11	6.54

CLUSTERS OF GALAXIES

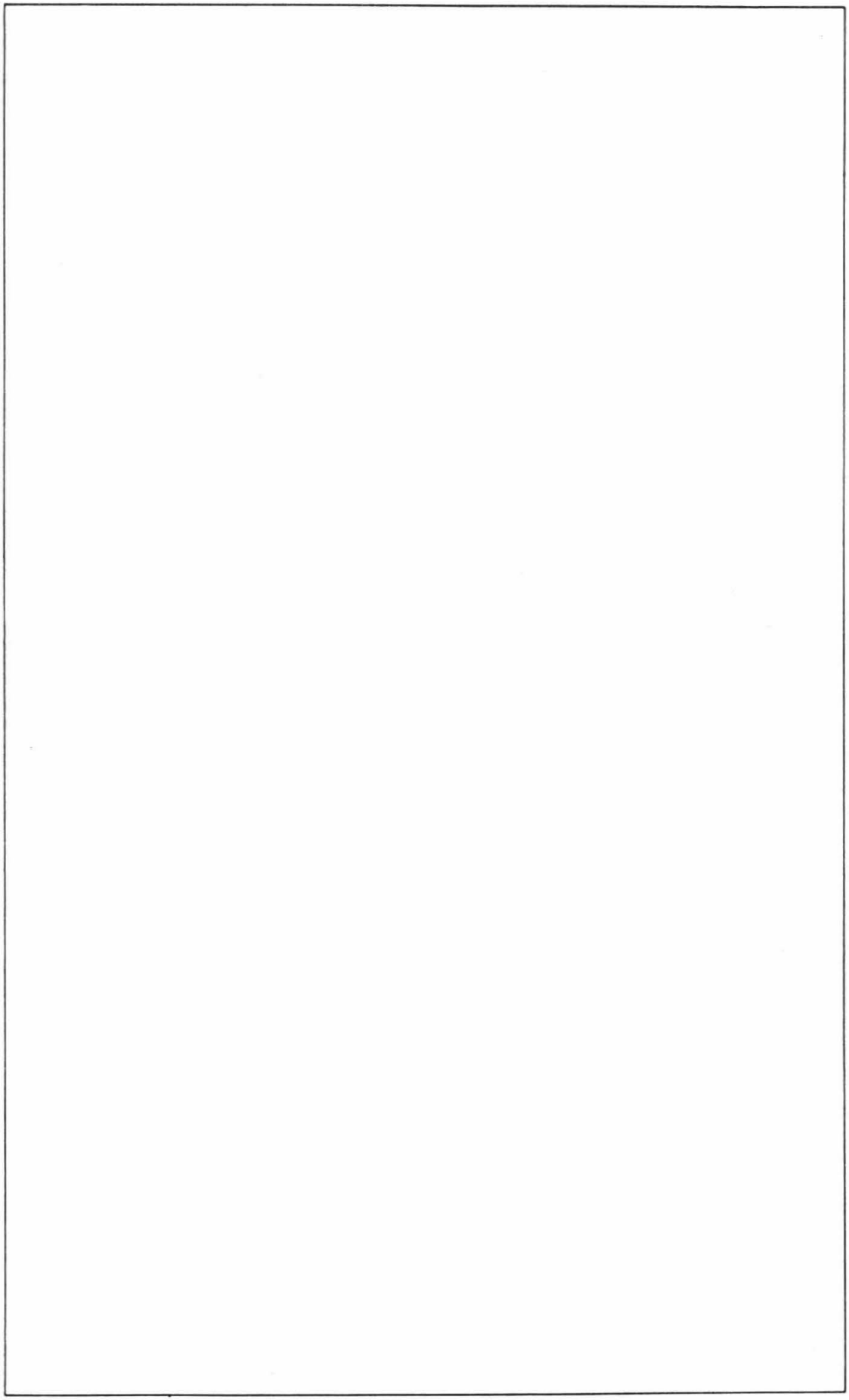
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1726.8 + 1458	open	128	4.0	MD	1
1739.0 + 1726	medium compact	204	5.7	MD	2
1752.6 + 1842	open	86	6.0	Near	3

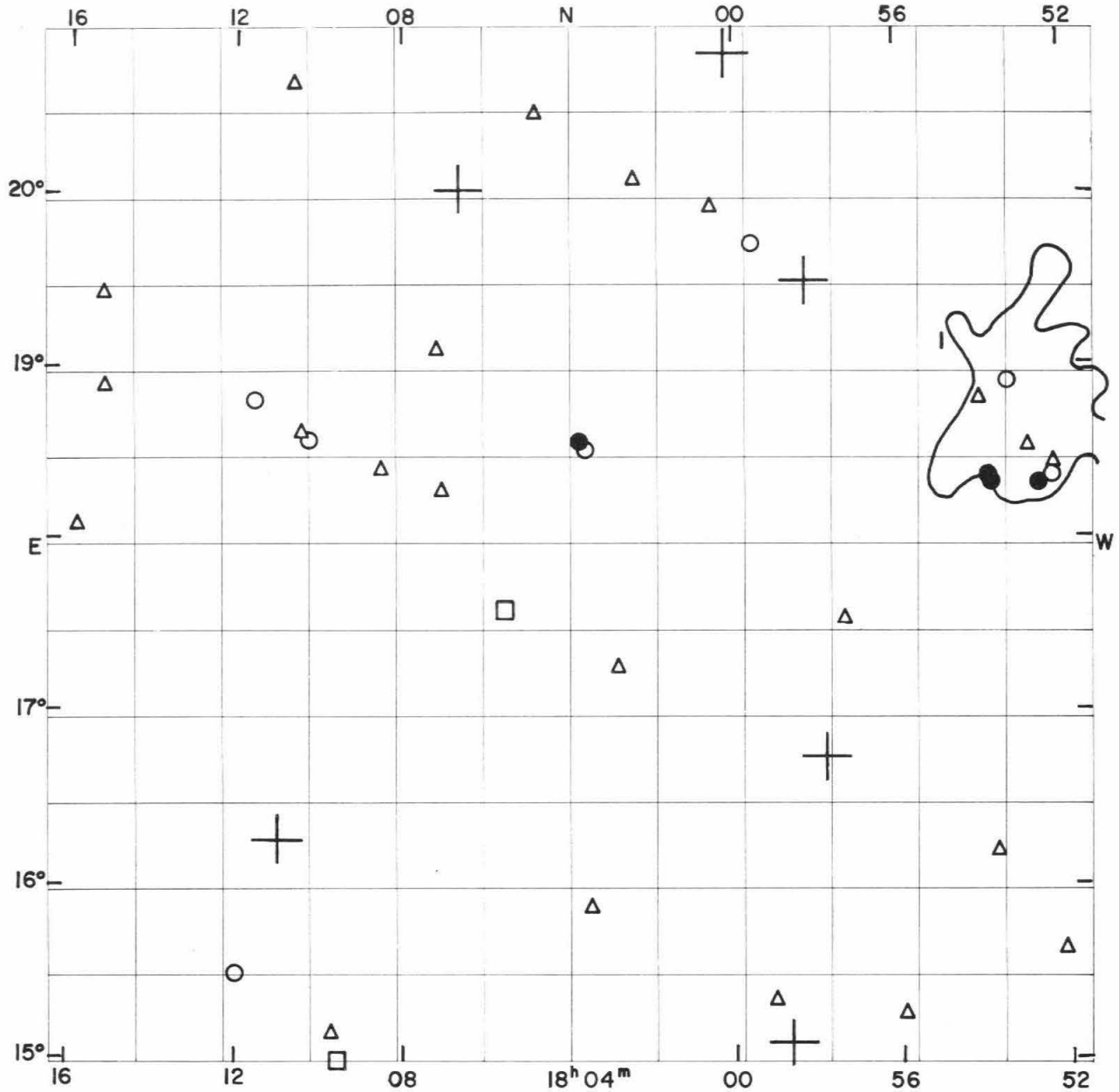
Average number of galaxies per cluster = 139.3

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
17 28.1	+ 19 47		15.6		very compact
17 28.4	+ 16 19	6379	14.6		
17 28.6	+ 19 48		15.4		
17 30.5	+ 15 37		15.7		
17 30.5	+ 16 26	6389	13.6		
17 30.5	+ 19 34		15.6		
17 31.2	+ 20 10		15.7		
17 31.5	+ 20 48		15.0		
17 32.8	+ 20 37		15.5		
17 33.4	+ 20 49		14.8		double system, S + compact E
17 34.1	+ 19 00		15.4		double system
17 34.3	+ 15 20		15.6		extremely diffuse spiral
17 34.5	+ 17 14		15.4		
17 34.7	+ 17 45		15.6		
17 35.3	+ 17 34		14.5		
17 35.3	+ 19 35		15.0		
17 36.6	+ 18 54	6408	14.0		
17 36.8	+ 19 13		15.4		
17 37.6	+ 16 54		15.4		
17 37.6	+ 19 49		15.3		compact
17 38.7	+ 18 51		15.2		
17 39.0	+ 17 23		15.4		
17 39.6	+ 20 09		15.2		
17 39.7	+ 18 19		15.2		
17 39.9	+ 18 02		15.7		
17 40.2	+ 17 01		15.5		
17 40.5	+ 19 30		15.6		
17 40.6	+ 16 14		15.1		double system
17 40.7	+ 19 01		15.7		
17 40.9	+ 19 02		15.5		
17 41.4	+ 20 45		15.7		
17 42.5	+ 19 05		15.7		
17 42.6	+ 19 04		15.7		
17 42.7	+ 19 33		15.5		compact
17 43.0	+ 18 09		14.8		
17 43.0	+ 20 35		15.6		
17 44.1	+ 18 38		15.5		
17 44.7	+ 20 47	6442	14.5		
17 45.0	+ 20 53		15.1		
17 45.5	+ 18 09		15.7		
17 45.5	+ 18 17		15.6		very diffuse
17 45.7	+ 17 41		15.3		
17 45.8	+ 20 51	6452	15.3		
17 46.0	+ 17 07		15.4		
17 46.0	+ 17 38		14.7		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
17	46.1	+17 58		15.1		triple system
17	46.2	+16 12		15.6		
17	46.6	+17 59		15.5		
17	46.9	+16 08		15.7		
17	47.0	+17 59		15.5		
17	47.0	+20 49	6458	14.9		
17	47.2	+18 35		14.9		
17	47.3	+16 36		15.6		
17	47.3	+16 42		15.3		double system
17	47.4	+20 46	6460	14.4		
17	47.7	+17 56		15.7		
17	48.4	+17 13	1268*	15.1		
17	48.5	+17 33	6467=6468	14.5		
17	48.7	+17 09		15.3		very compact
17	48.8	+20 26		15.7		
17	48.9	+16 40		15.7		
17	49.0	+15 50		15.4		
17	49.1	+20 28		15.7		compact
17	49.2	+18 46		15.2		disrupted multiple system
17	49.9	+18 41		15.5		
17	50.5	+20 56		15.6		
17	52.2	+15 37		15.7		diffuse
17	52.3	+18 23	6490	14.7		
17	52.3	+18 27		15.7		
17	52.6	+18 20	6495	13.8		





FIELD No. 113

18^h04^m $+18^o00'$

Survey Plate No. 529

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
24502	17 57 49.8	+ 16 45 08	4.71
24510	17 58 17.5	+ 19 30 23	6.42
24522	17 58 41.6	+ 15 05 42	6.30
24563	18 00 14.7	+ 20 49 55	5.09
24743	18 06 43.4	+ 20 02 09	5.24
24863	18 11 01.4	+ 16 15 32	6.72

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1752.6 + 1842	open	86	6.0	Near	1

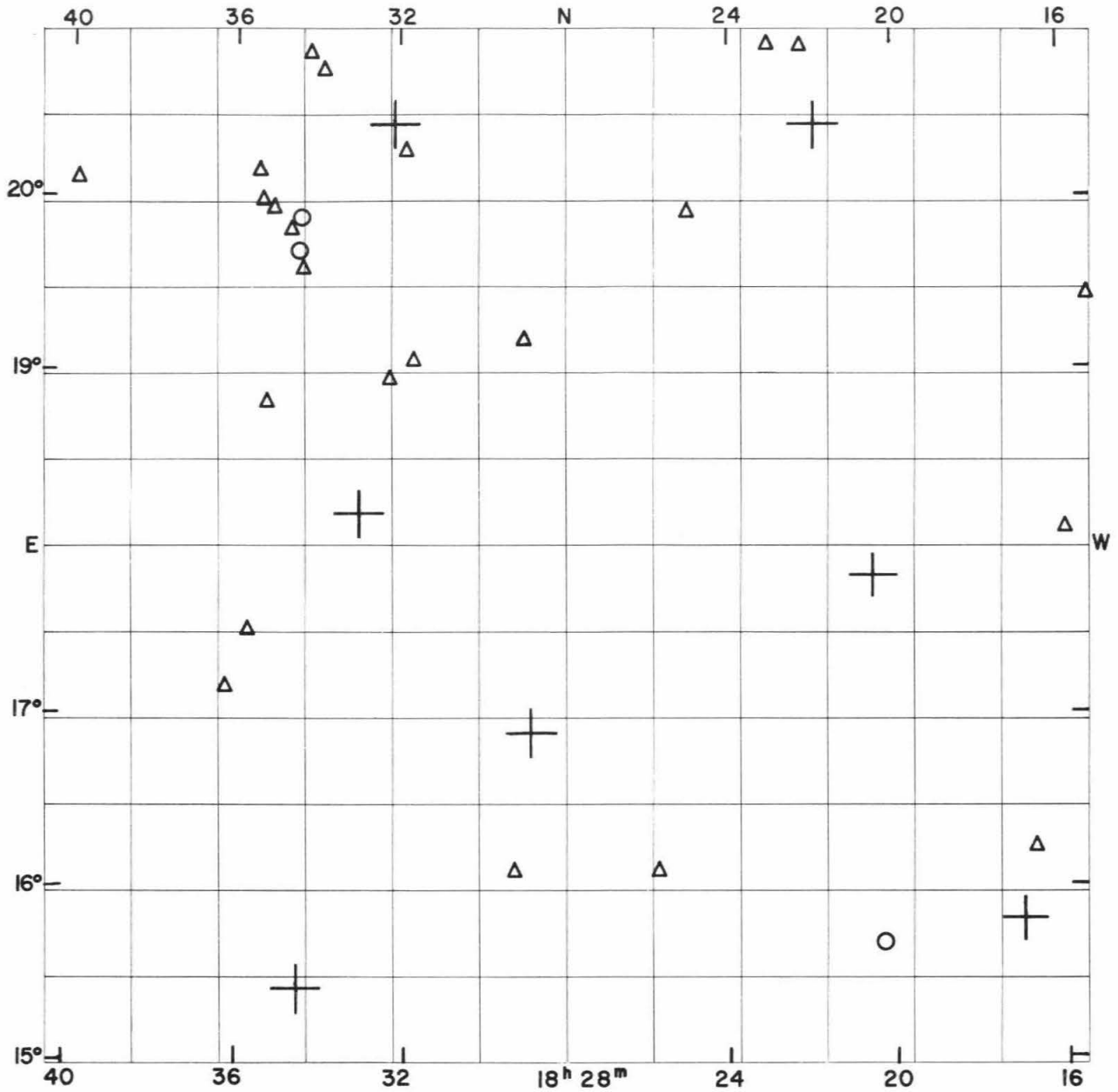
Average number of galaxies per cluster = 86.0

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
17 52.2	+ 15 37		15.7		diffuse
17 52.3	+ 18 23	6490	14.7		
17 52.3	+ 18 27		15.7		
17 52.6	+ 18 20	6495	13.8		
17 52.9	+ 18 33		15.7		extremely diffuse
17 53.4	+ 18 56		15.0		triple nebula
17 53.8	+ 16 12		15.7		double nebula
17 53.8	+ 18 21	6500	13.4		
17 53.9	+ 18 23	6501	13.4		
17 54.1	+ 18 49		15.1		
17 56.0	+ 15 16		15.1		
17 57.4	+ 17 33		15.4		
17 59.1	+ 15 20		15.6		multiple system
17 59.6	+ 19 44	6527	14.9		
18 00.6	+ 19 56		15.7		
18 02.4	+ 20 05		15.3		
18 02.8	+ 17 16		15.6		
18 03.5	+ 15 53		15.5		
18 03.6	+ 18 32	6549	14.8		
18 03.8	+ 18 35	6548=6550	13.1		
18 04.9	+ 20 29		15.6		
18 05.6	+ 17 35	6555	12.7		
18 07.1	+ 18 17		15.2		
18 07.2	+ 19 06		15.1		
18 08.6	+ 18 25		15.7		
18 09.6	+ 14 57	6574	12.5	+ 2371	m_H = 12.7 S
18 09.7	+ 15 08		15.5		
18 10.3	+ 18 35		15.0		disrupted spiral
18 10.5	+ 18 38		15.4		
18 10.7	+ 20 40		15.1		
18 11.6	+ 18 49	6587	14.3		
18 12.0	+ 15 29		14.8		
18 15.3	+ 18 53		15.6		
18 15.3	+ 19 25		15.5		
18 15.9	+ 18 05		15.2		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6574	-	-	12.88	Sb	-	Sb	-	-



FIELD No. 114

18^h28^m $+18^\circ00'$

Survey Plate No. 808

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
25002	18 17 01.3	+ 15 48 14	7.00
25093	18 20 36.4	+ 17 48 00	5.48
25121	18 21 56.6	+ 20 25 24	6.63
25284	18 28 50.9	+ 16 53 32	5.67
25371	18 32 10.4	+ 20 25 34	6.44
25398	18 33 00.5	+ 18 09 43	5.73
25433	18 34 26.6	+ 15 24 16	6.92

CLUSTERS OF GALAXIES

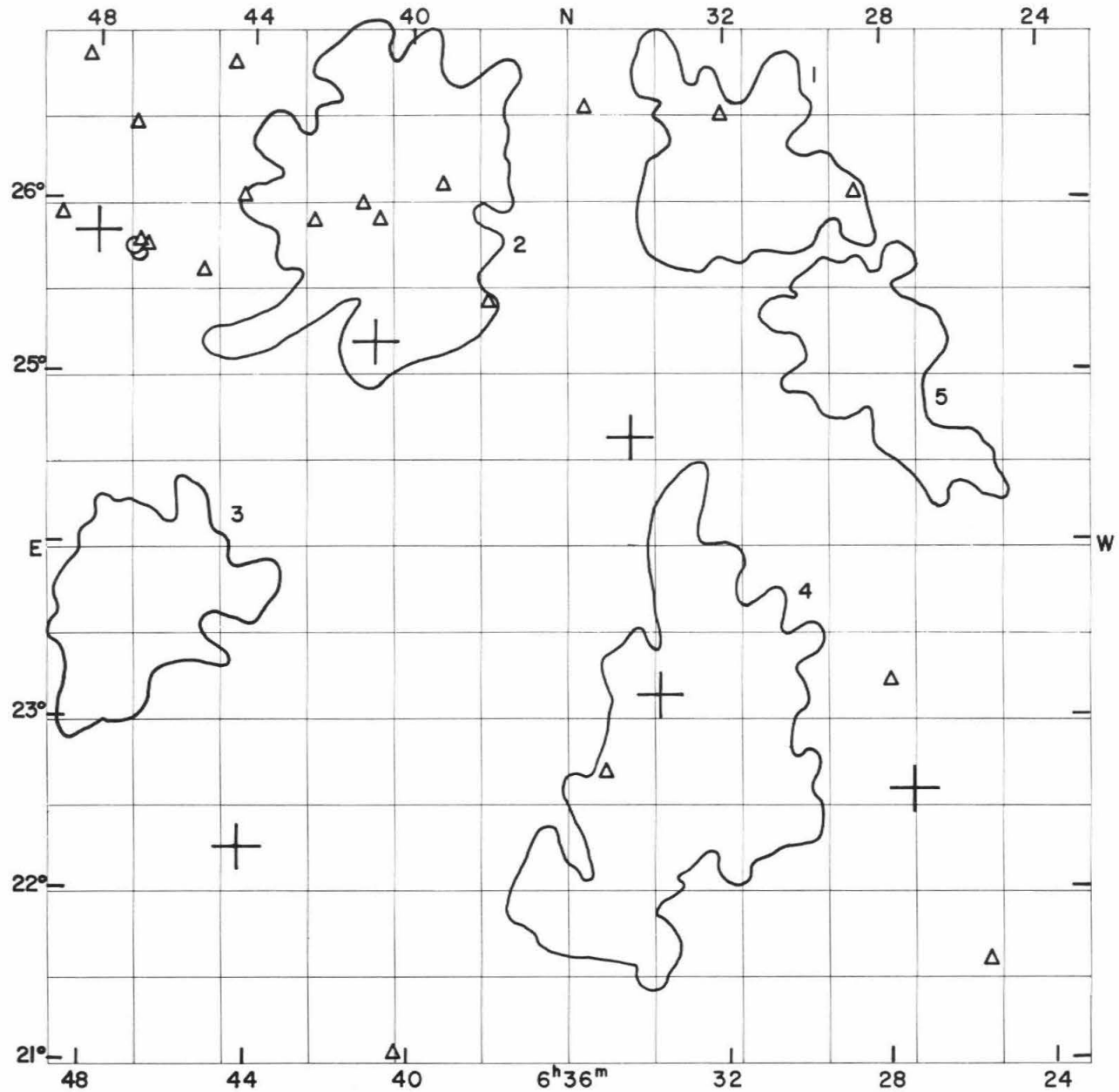
No clusters in this field

GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
18 15.3	+ 19 25		15.5		
18 15.9	+ 18 05		15.2		
18 16.7	+ 16 14		15.1		
18 20.4	+ 15 40	6627	14.5	+ 5206	
18 22.3	+ 20 53		15.2		
18 23.1	+ 20 53		15.4		
18 25.1	+ 19 55		15.3		
18 25.7	+ 16 06		15.7		very diffuse
18 29.0	+ 19 10		15.4		
18 29.2	+ 16 05		15.4		
18 31.7	+ 19 03		15.7		
18 31.9	+ 20 16		15.7		
18 32.3	+ 18 56		15.2		
18 33.9	+ 20 44		15.7		
18 34.2	+ 20 50		15.7		
18 34.4	+ 19 35		15.7		
18 34.5	+ 19 41		14.8		
18 34.5	+ 19 53		15.0		
18 34.7	+ 19 48		15.7		
18 35.1	+ 19 56		15.6		
18 35.2	+ 18 48		15.4		
18 35.4	+ 19 58		15.5		
18 35.5	+ 20 09		15.6		
18 35.7	+ 17 29		15.5		
18 36.2	+ 17 09		15.2		very compact
18 39.9	+ 20 05		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6627	-	-	14.48	SBb	14.4	SBb	-	-



FIELD No. 115

6^h36^m $+24^\circ00'$

Survey Plate No. 23

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
8429	6 27 20.7	+ 22 34 48	6.83
8599	6 33 40.5	+ 23 08 26	6.80
8619	6 34 23.3	+ 24 38 03	6.44
8786	6 40 51.4	+ 25 10 57	3.18
8868	6 44 12.8	+ 22 15 03	7.02
8944	6 47 55.0	+ 25 49 21	6.91

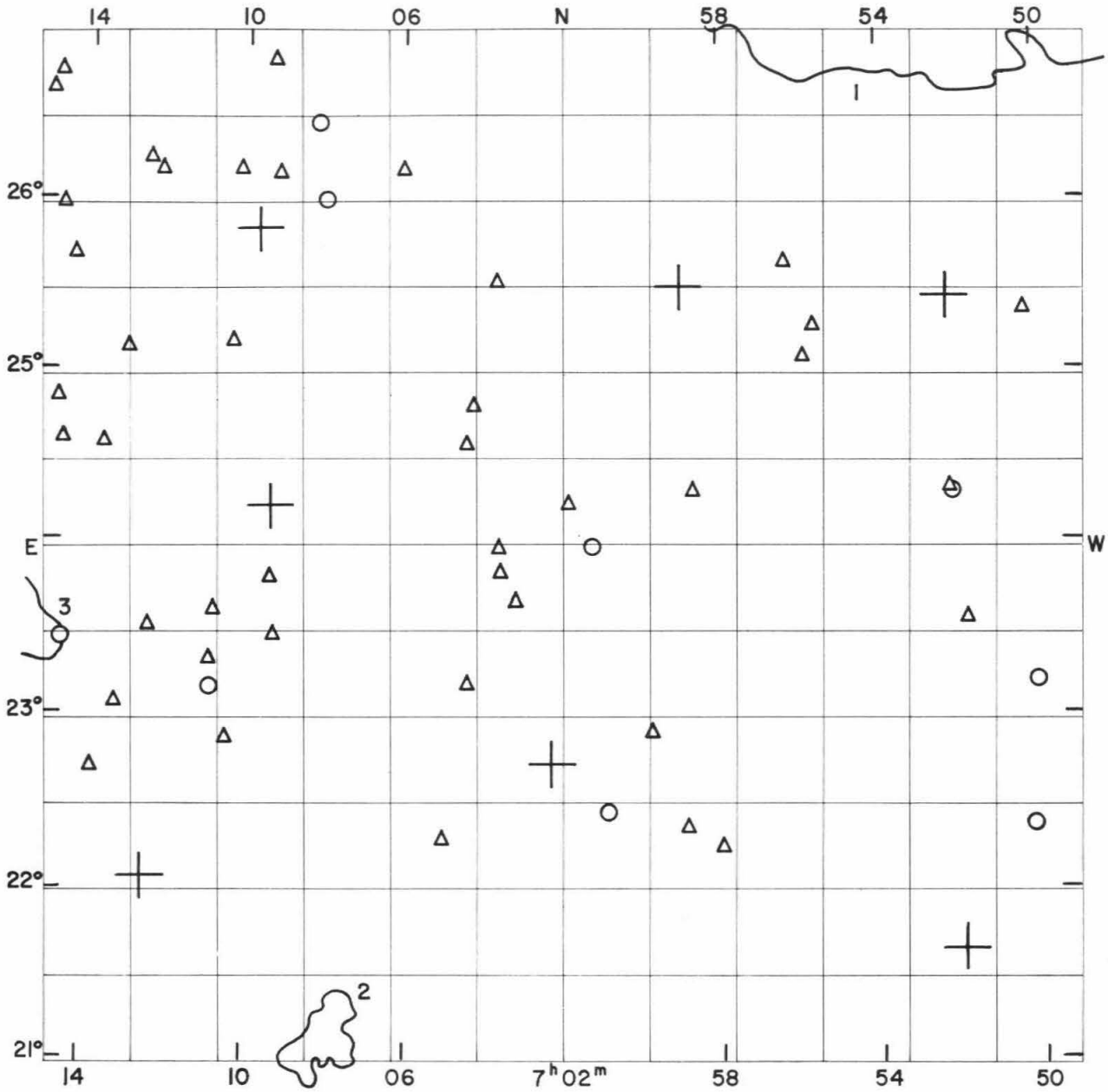
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0628.1 + 2502	medium compact	219	5.2	MD	5
0631.6 + 2609	medium compact	140	6.5	Near	1
0632.9 + 2244	medium compact	403	8.9	Near	4
0640.4 + 2559	open	155	9.2	Near	2
0646.6 + 2340	medium compact	193	6.3	MD	3

Average number of galaxies per cluster = 222.0

GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
6 25.6 + 21 35		15.4		
6 28.0 + 23 12		15.7		
6 28.7 + 26 02		15.7		
6 32.1 + 26 30		15.5		
6 35.0 + 22 41		15.6		
6 35.6 + 26 32		15.4		diffuse
6 38.0 + 25 25		15.7		
6 39.2 + 26 05		15.4		
6 40.3 + 21 03		15.3		
6 40.8 + 25 53		15.4		
6 41.2 + 25 59		15.5		
6 42.5 + 25 52		15.4		
6 44.2 + 26 00		15.6		
6 44.5 + 26 47		15.5		very compact
6 45.2 + 25 34		15.4		
6 46.7 + 25 44		15.3		compact
6 46.8 + 25 45		15.1		
6 46.9 + 25 41		14.3		double nebula
6 47.0 + 25 43		15.0		
6 47.0 + 26 26		15.2		double nebula
6 48.2 + 26 49		15.2		extremely compact
6 48.9 + 25 54		15.6		



FIELD No. 116

7^h02^m $+24^o00'$

Survey Plate No. 1590

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
9053	6 51 57.3	+ 21 38 08	6.81
9064	6 52 14.2	+ 25 26 24	5.77
9254	6 59 02.9	+ 25 29 54	6.94
9337	7 02 17.8	+ 22 42 51	5.91
9521	7 09 24.2	+ 24 12 50	5.76
9534	7 09 44.9	+ 25 50 02	6.89
9614	7 12 34.4	+ 22 03 19	7.38

CLUSTERS OF GALAXIES

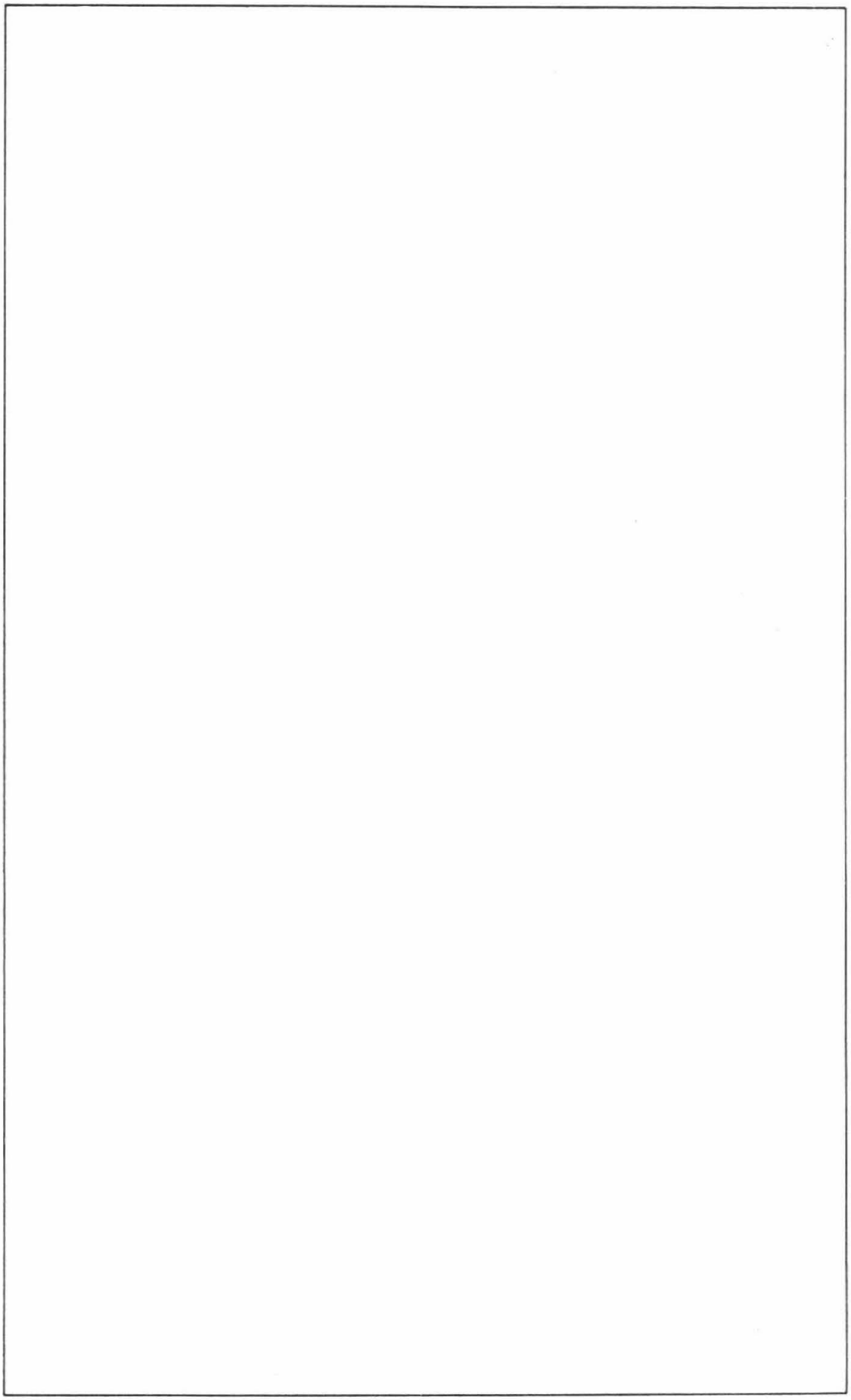
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0654.8 + 2753	open	397	17.4	Near	1
0708.0 + 2107	medium compact	82	2.2	D	2
0720.6 + 2259	open	217	14.2	Near	3

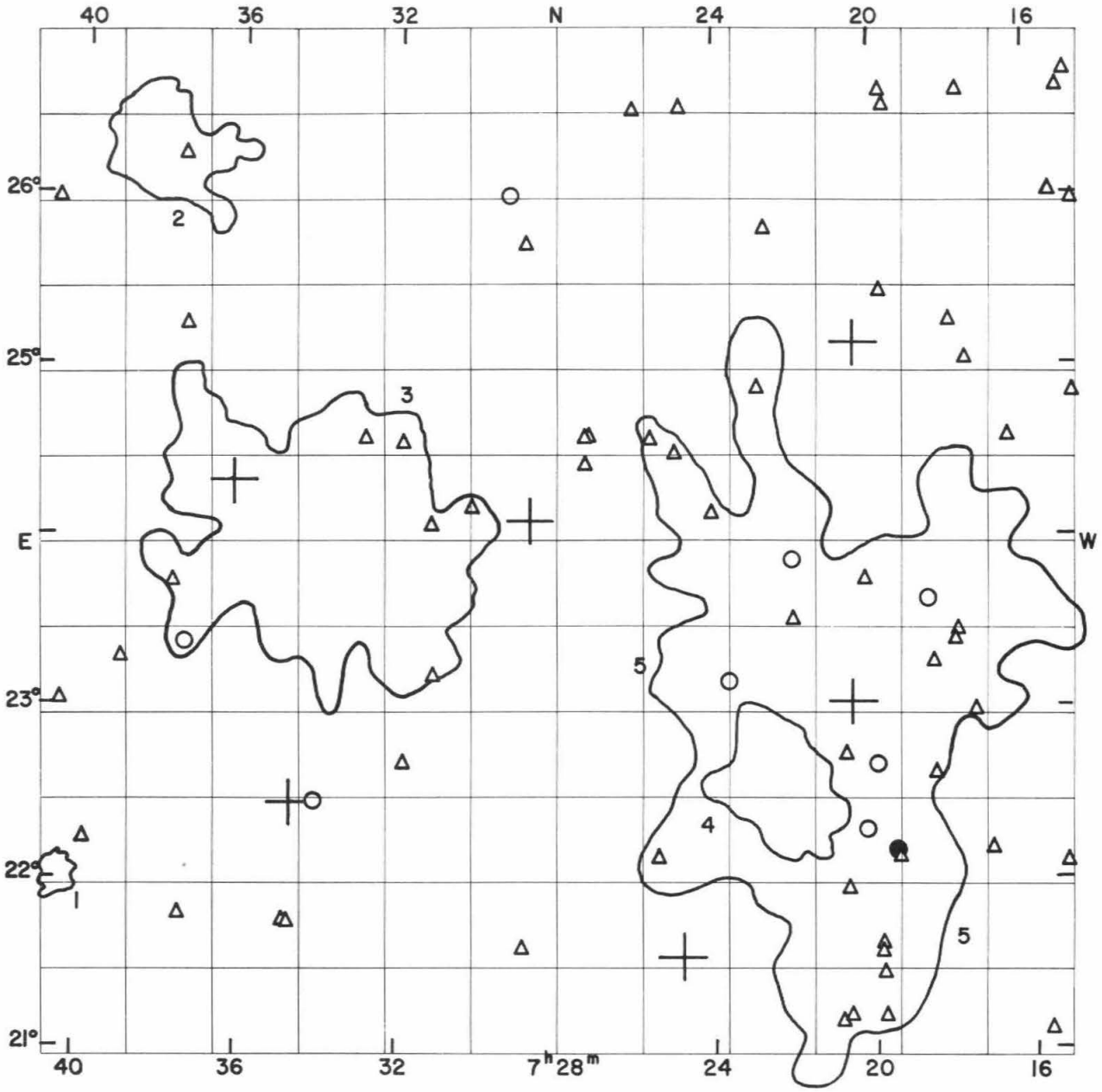
Average number of galaxies per cluster = 232.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
6 50.0 + 23 12		14.7		
6 50.2 + 22 22		14.9		
6 50.3 + 25 21		15.7		diffuse
6 51.8 + 23 34		15.2		
6 52.1 + 24 17		14.5		compact
6 52.2 + 24 19		15.5		
6 55.6 + 25 16		15.7		
6 55.9 + 25 06		15.4		
6 56.3 + 25 38		15.6		
6 58.0 + 22 14		15.7		
6 58.7 + 24 18		15.5		
6 58.9 + 22 21		15.6		
6 59.8 + 22 55		15.5		
7 00.9 + 22 27		14.7		
7 01.3 + 23 59		14.8		
7 01.9 + 24 14		15.6		
7 03.2 + 23 40		15.4		
7 03.6 + 23 50		15.3		
7 03.6 + 25 32		15.5		
7 03.7 + 23 58		15.4		
7 04.3 + 24 48		15.7		compact
7 04.4 + 23 12		15.4		
7 04.4 + 24 35		15.6		
7 05.0 + 22 17		15.7		diffuse
7 06.0 + 26 10		15.5		
7 08.0 + 26 00		14.8		
7 08.2 + 26 28	2180*	15.0		
7 09.3 + 23 28		15.7		
7 09.3 + 26 10		15.3		
7 09.4 + 23 49		15.3		triple system
7 09.4 + 26 49		15.6		double nebula
7 10.2 + 26 11		15.6		
7 10.4 + 25 11		15.7		
7 10.5 + 22 53		15.6		very diffuse
7 10.8 + 23 10		14.8		
7 10.8 + 23 36		15.6		
7 10.9 + 23 20		15.1		
7 12.2 + 26 10		15.2		
7 12.4 + 23 31		15.4		diffuse
7 12.5 + 26 15		15.4		
7 13.0 + 25 08		15.6		
7 13.2 + 23 05		15.6		
7 13.6 + 24 35		15.5		
7 13.8 + 22 42		15.7		
7 14.4 + 25 40		15.6		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
7	14.6	+ 23 27	2357	14.6		
7	14.7	+ 24 36		15.4		
7	14.8	+ 25 58		15.7		
7	14.9	+ 24 50		15.6		
7	14.9	+ 26 44		15.7		
7	15.1	+ 26 38		15.5		





FIELD No. 117

7^h28^m $+24^\circ00'$

Survey Plate No. 1310

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
9843	7 20 25.7	+ 25 08 54	5.08
9844	7 20 28.0	+ 23 02 36	6.02
9957	7 24 46.4	+ 21 32 57	5.27
10063	7 28 38.0	+ 24 06 24	8.0
10214	7 34 41.3	+ 22 27 15	6.94
10265	7 36 10.8	+ 24 20 15	6.04

CLUSTERS OF GALAXIES

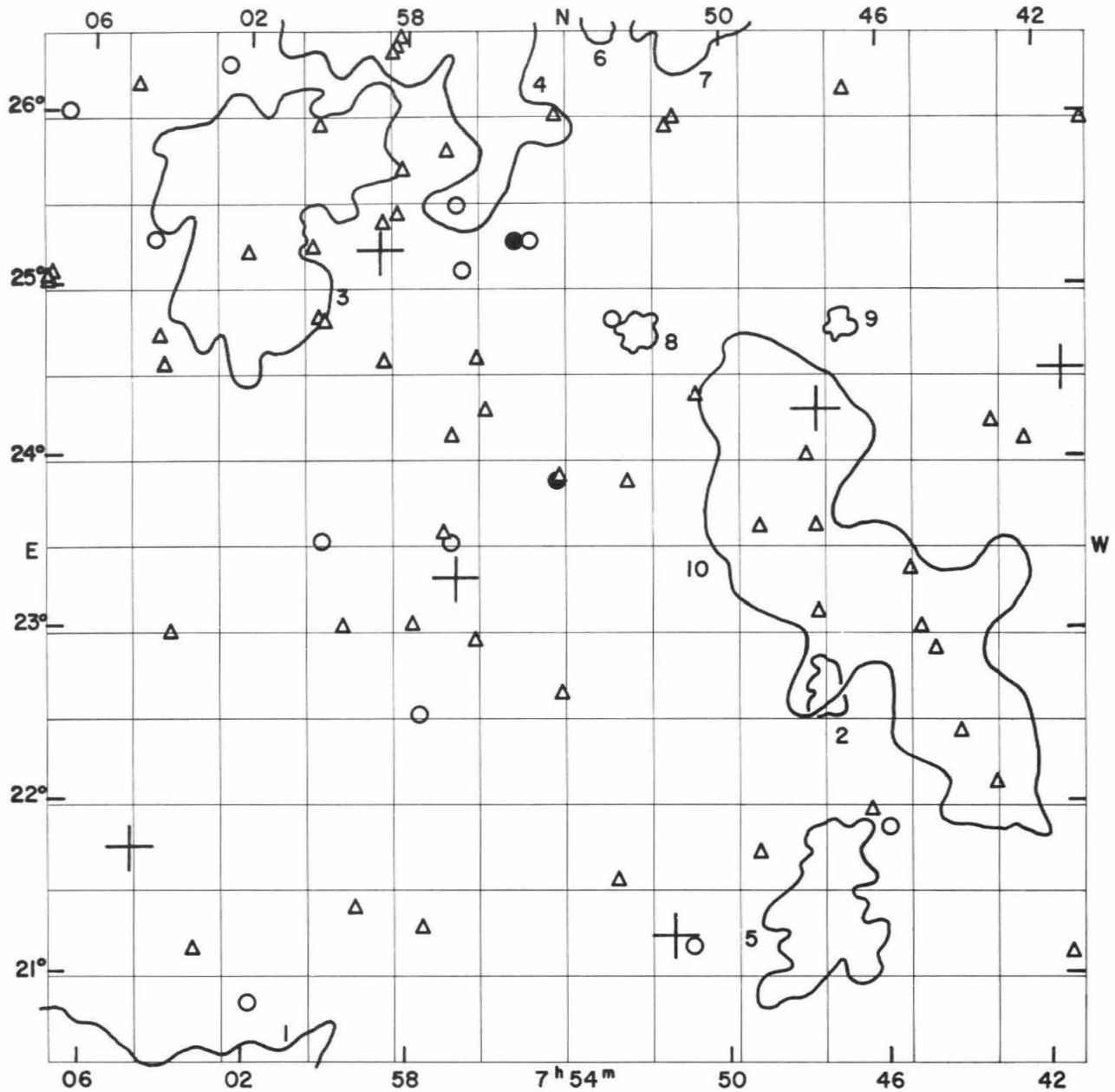
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0720.6 + 2259	open	217	14.2	Near	5
0722.2 + 2231	medium compact	111	4.1	D	4
0733.8 + 2356	open	263	9.3	Near	3
0737.9 + 2615	open	177	3.9	D	2
0740.4 + 2200	compact	72	1.2	VD	1

Average number of galaxies per cluster = 168.0

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 14.8	+ 25 58		15.7		
7 14.9	+ 24 50		15.6		
7 14.9	+ 26 44		15.7		
7 15.1	+ 26 38		15.5		
7 15.2	+ 22 05		15.7		
7 15.4	+ 26 02		15.5		diffuse
7 15.6	+ 21 07		15.7		
7 16.5	+ 24 35		15.7		
7 17.0	+ 22 11		15.1		
7 17.4	+ 23 00		15.3		
7 17.6	+ 25 03		15.4		
7 17.7	+ 26 37		15.4		double nebula
7 17.8	+ 23 27		15.6		
7 17.9	+ 23 24		15.1		
7 18.0	+ 25 16		15.5		
7 18.4	+ 22 38		15.5		
7 18.5	+ 23 16		15.2		
7 18.6	+ 23 38		14.7		
7 19.4	+ 22 08		15.4		
7 19.5	+ 22 10	2365	13.8		
7 19.6	+ 26 32		15.4		
7 19.7	+ 21 12		15.7		
7 19.7	+ 26 37		15.1		
7 19.8	+ 21 27		15.6		
7 19.8	+ 21 35	2188*	15.3		compact
7 19.8	+ 21 37	2186*	15.1		
7 19.8	+ 25 26		15.6		
7 19.9	+ 22 40		14.4		
7 20.2	+ 22 18		14.8		
7 20.2	+ 23 45		15.5		diffuse spiral
7 20.6	+ 21 12		15.7		
7 20.7	+ 21 57		15.5		
7 20.7	+ 22 44		15.6		diffuse
7 20.8	+ 21 10		15.7		
7 22.0	+ 23 31		15.7		
7 22.0	+ 23 53	2370	14.3		
7 22.7	+ 25 49		15.2		
7 22.9	+ 24 53		15.6		
7 23.6	+ 23 10	2376	14.7		
7 24.1	+ 24 08		15.4		
7 24.9	+ 26 30		15.6		diffuse
7 25.0	+ 24 29		15.5		
7 25.4	+ 22 08		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 25.6 +24 35		15.1		
7 26.1 +26 30		15.2		
7 27.2 +24 35		15.6		diffuse with nucleus
7 27.3 +24 25	2191*	15.3		
7 27.3 +24 35	2398	15.3		double nebula
7 28.7 +25 43		15.3		
7 28.8 +21 36		15.6		
7 29.2 +26 01	2405	14.7		
7 30.2 +24 10		15.4		
7 31.1 +23 13		15.2		
7 31.1 +24 05	2198*	15.3		
7 31.8 +22 41		15.7		
7 31.9 +24 34		15.7		
7 32.8 +24 35		15.4		compact
7 34.0 +22 28		14.9		
7 34.7 +21 45		15.3		
7 34.8 +21 46		15.4		
7 37.4 +21 48		15.6		
7 37.4 +23 23		15.0		
7 37.4 +25 15		15.5		compact
7 37.5 +26 15		15.6		
7 37.7 +23 45		15.3		compact
7 38.9 +23 18		15.4		very compact
7 39.8 +22 14		15.2		
7 40.5 +23 03		15.3		
7 40.7 +25 59		15.2		



FIELD No. 118

7^h54^m $+23^o30'$

Survey Plate No. 226

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
10403	7 41 25.9	+ 24 31 11	3.68
10573	7 47 39.3	+ 24 17 19	7.01
10671	7 51 16.8	+ 21 14 13	7.01
10799	7 56 44.1	+ 23 19 14	6.86
10871	7 58 43.0	+ 25 13 44	6.20
11021	8 04 49.4	+ 21 43 42	5.38

CLUSTERS OF GALAXIES

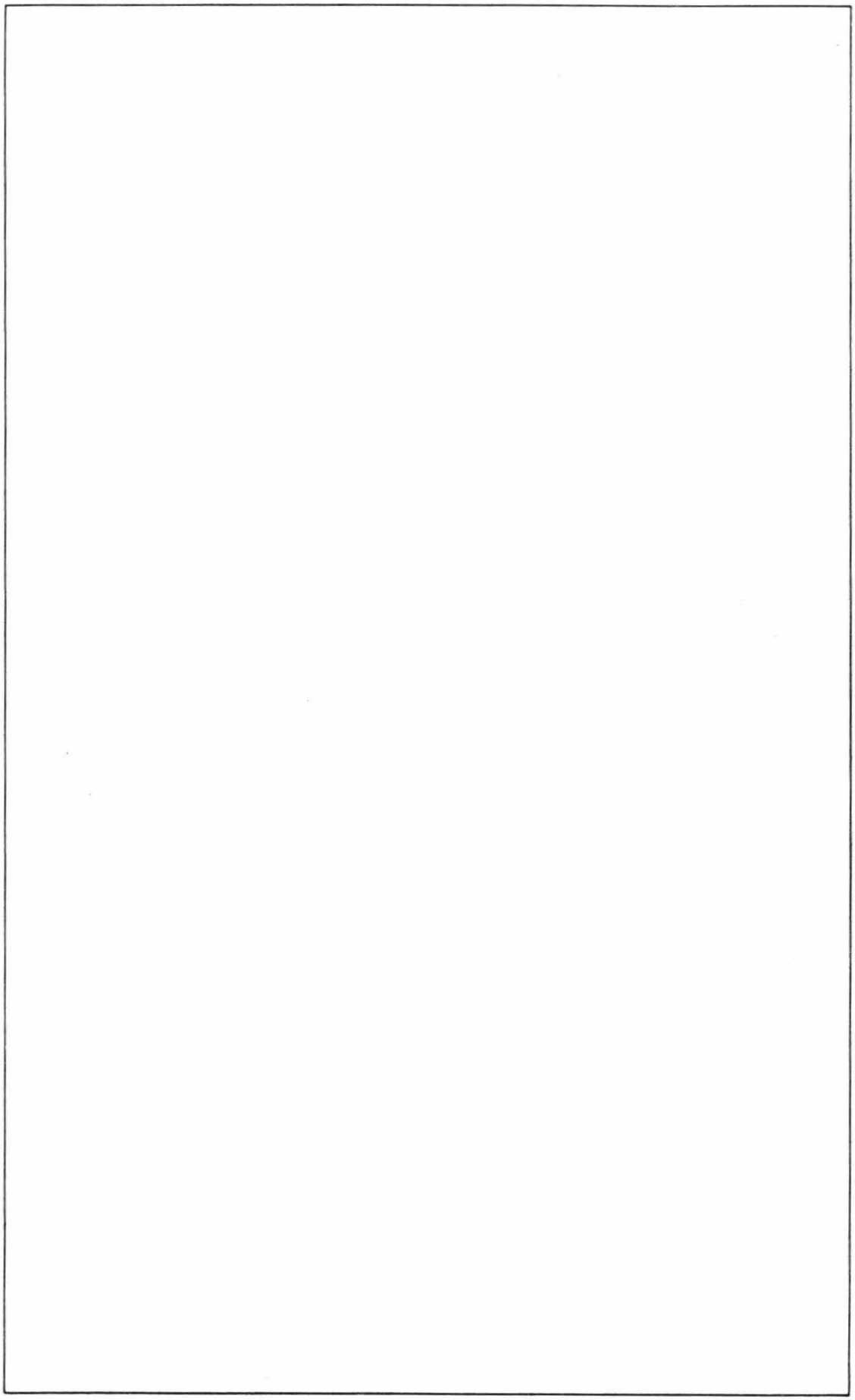
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0746.5 + 2315	open	172	10.0	Near	10
0747.0 + 2447	compact	107	0.9	ED	9
0747.4 + 2241	medium compact	76	1.5	VD	2
0747.5 + 2120	medium compact	171	3.9	D	5
0750.9 + 2634	medium compact	146	3.0	MD	7
0752.1 + 2445	compact	149	1.2	ED	8
0752.9 + 2833	open	933	22.8	Near	4
0753.1 + 2635	compact	127	1.3	D	6
0801.8 + 2523	medium compact	253	7.2	MD	3
0804.8 + 1959	open	468	10.3	MD	1

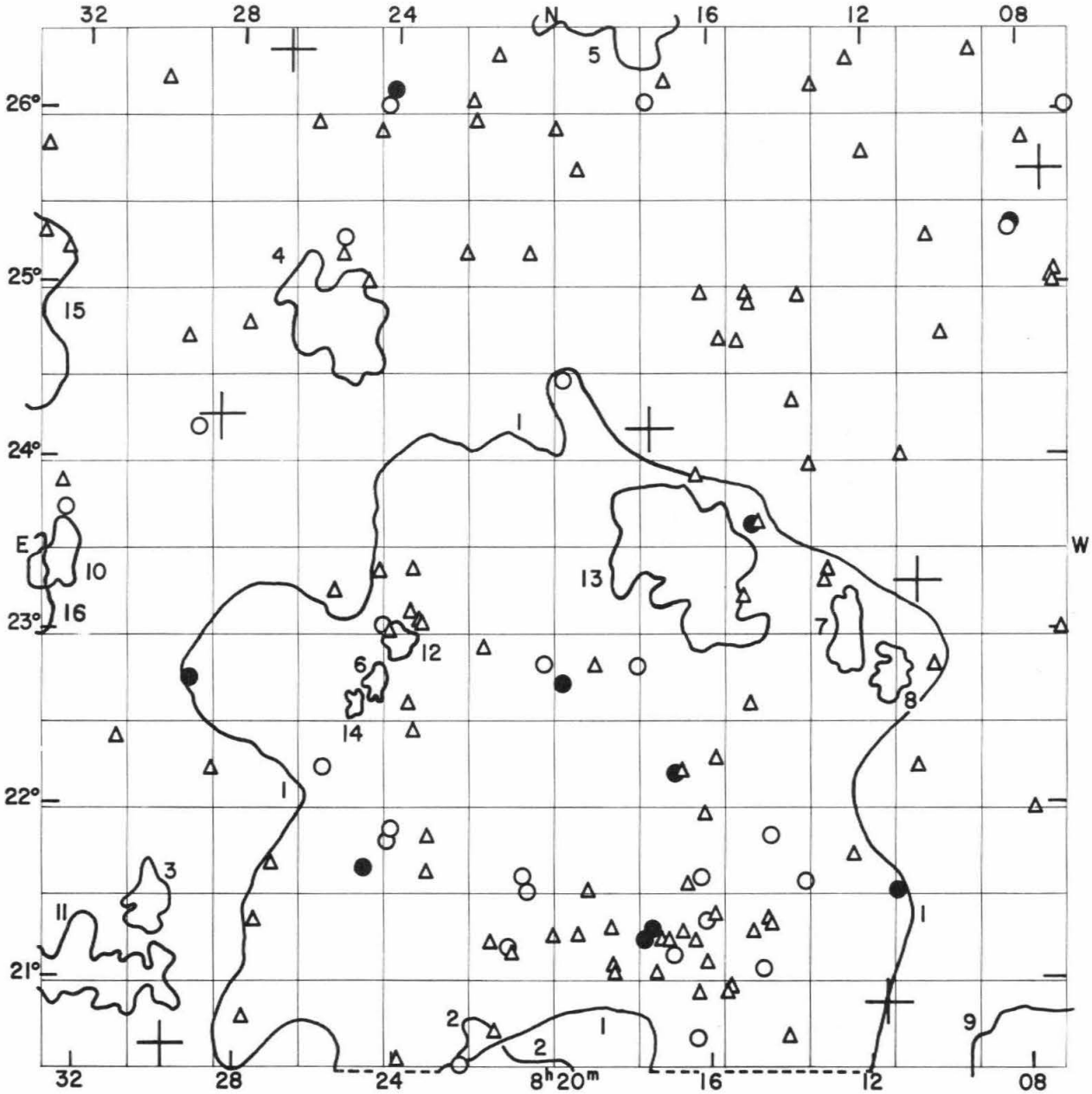
Average number of galaxies per cluster = 260.2

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 40.7 + 25 59		15.2		
7 41.5 + 21 07		15.4		
7 42.5 + 24 06		15.7		diffuse
7 43.3 + 22 07		15.4		
7 43.3 + 24 13		15.7		diffuse
7 44.1 + 22 25		15.6		compact
7 44.7 + 22 54		15.3		
7 45.1 + 23 01		15.7		
7 45.4 + 23 21		15.3		
7 46.0 + 21 52		14.9		
7 46.4 + 21 58		15.2		
7 46.9 + 26 09		15.7		
7 47.6 + 23 07		15.5		
7 47.7 + 23 37		15.3		compact
7 47.9 + 24 01		15.1		
7 49.1 + 23 36	477*	15.5		double system
7 49.2 + 21 43		15.6		
7 50.7 + 24 22		15.7		diffuse
7 50.8 + 21 10		14.9		
7 51.3 + 25 59		15.6		compact
7 51.5 + 25 56		15.7		diffuse
7 52.5 + 23 52		15.4		
7 52.7 + 21 34		15.6		
7 52.8 + 24 50		14.7		
7 54.1 + 22 39		15.5		
7 54.2 + 23 55	2480	15.2		
7 54.3 + 23 54	2481	13.4		
7 54.3 + 26 00		15.6		brightest of 3
7 54.9 + 25 17	2486	14.3		
7 55.3 + 25 16	2487	14.0		
7 56.0 + 24 17	481*	15.1		
7 56.2 + 22 57		15.7		
7 56.3 + 24 35		15.5		
7 56.6 + 25 06	2498	14.4		
7 56.8 + 25 29	482*	15.0		
7 56.9 + 23 31		14.8		
7 56.9 + 24 08		15.5		double system
7 57.0 + 23 34		15.4		compact

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
7 57.0	+ 25 47		15.6		
7 57.5	+ 21 17		15.6		diffuse
7 57.6	+ 22 32	2503	15.0		
7 57.8	+ 23 02		15.7		
7 58.2	+ 25 41		15.6		
7 58.2	+ 26 27		15.6		compact
7 58.3	+ 25 25		15.5		diffuse double system
7 58.3	+ 26 23		15.7		compact
7 58.4	+ 26 21		15.7		diffuse
7 58.6	+ 24 34	2218*	15.7		double system
7 58.7	+ 25 22		15.5		
7 59.2	+ 21 24		15.7		
7 59.6	+ 23 01		15.7		
8 00.1	+ 23 32		14.2		
8 00.1	+ 24 47		15.5		
8 00.2	+ 24 48		15.7		
8 00.3	+ 25 56	490*	15.6		
8 00.5	+ 25 14		15.2		very compact
8 01.8	+ 20 50		14.8		
8 02.0	+ 25 12		15.3		
8 02.6	+ 26 18	492*	14.6		
8 03.2	+ 21 08		15.5		
8 03.9	+ 22 59		15.3		
8 04.1	+ 24 31		15.3		
8 04.3	+ 24 42		15.7		
8 04.4	+ 25 16	493*	14.8		
8 04.9	+ 26 10		15.7		extremely diffuse
8 06.7	+ 26 01	495*+2229*	14.7		double system
8 07.0	+ 25 03	497*	15.2		
8 07.1	+ 25 00		15.6		
8 07.1	+ 25 01		15.4		





FIELD No. 119

8^h20^m $+23^\circ30'$

Survey Plate No. 1364

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ′ ″	
11091	8 07 26.7	+ 25 39 38	5.83
11176	8 10 44.1	+ 23 17 23	6.44
11195	8 11 32.2	+ 20 51 38	6.83
11363	8 17 33.9	+ 24 10 52	5.87
11609	8 26 49.5	+ 26 21 39	6.67
11655	8 28 33.3	+ 24 15 04	5.73
11687	8 29 49.2	+ 20 36 45	5.52

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0804.8 + 1959	open	468	10.3	MD	9
0811.4 + 2245	medium compact	59	1.5	VD	8
0812.5 + 2300	medium compact	72	1.7	VD	7
0816.5 + 2324	medium compact	189	4.6	MD	13
0818.6 + 2702	open	203	5.7	MD	5
0819.6 + 2209	medium compact	325	21.6	Near	1*
0820.8 + 1915	medium compact	560	8.4	MD	2
0823.9 + 2257	compact	97	1.0	VD	12
0824.5 + 2244	compact	52	0.8	ED	6
0825.0 + 2236	compact	56	0.5	ED	14
0825.6 + 2447	medium compact	95	3.3	D	4
0830.1 + 2126	compact	89	1.6	VD	3
0831.2 + 2100	compact	186	2.9	D	11
0832.6 + 2324	open	154	1.7	VD	10
0834.5 + 2307	open	158	4.7	MD	16
0837.0 + 2506	open	403	12.7	Near	15

Average number of galaxies per cluster = 197.9

*Cluster No. 1 is the conventional Cancer Cluster of galaxies!

GALAXIES

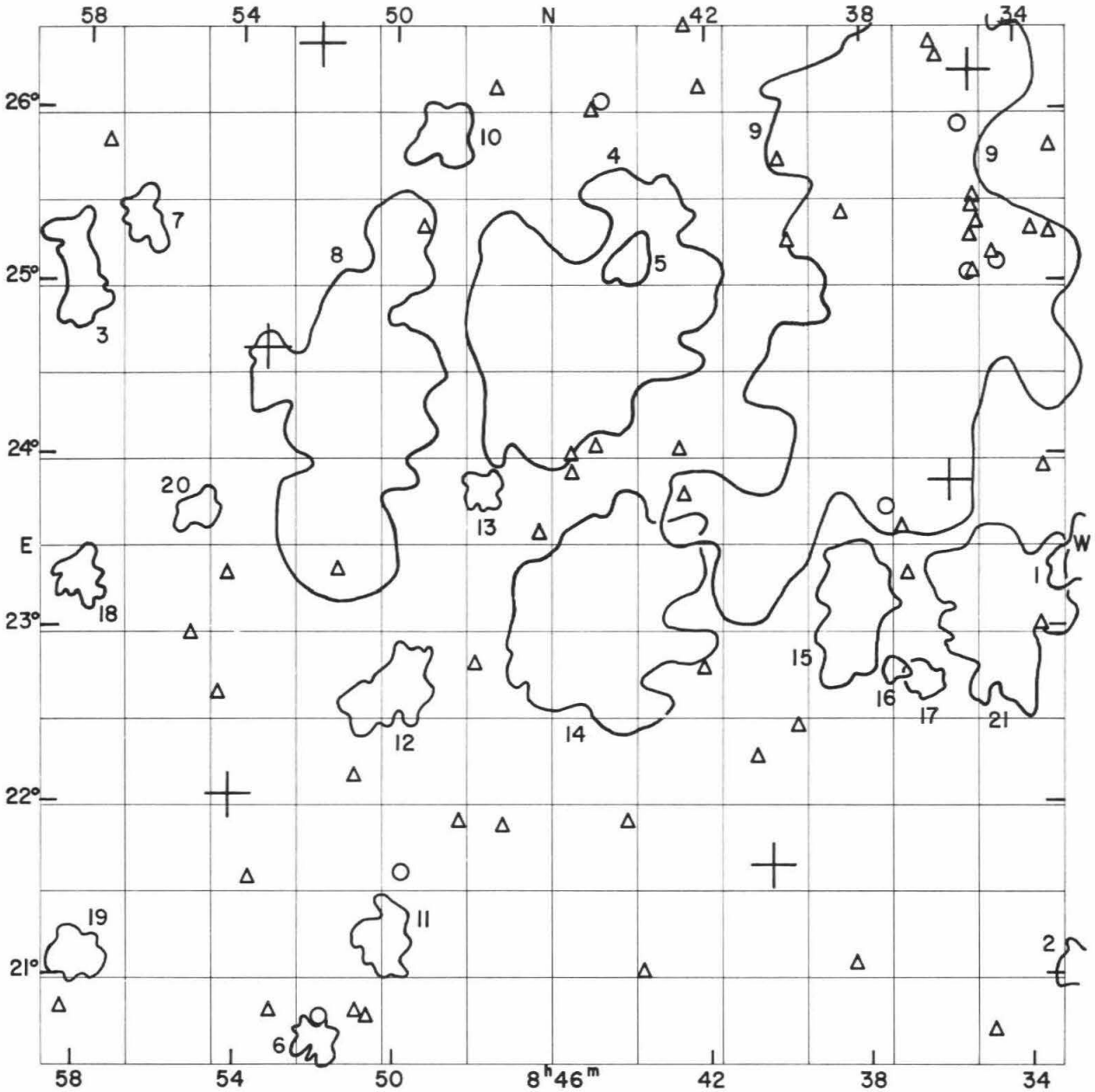
Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
8 06.7 + 26 01	495*+2229*	14.7		double system
8 07.0 + 25 03	497*	15.2		
8 07.1 + 23 00		15.5		
8 07.1 + 25 00		15.6		
8 07.1 + 25 01		15.4		
8 07.9 + 21 58		15.7		
8 07.9 + 25 50	2230*	15.6		compact
8 08.2 + 25 20	2535	13.5	+4243	
8 08.3 + 25 19	2536	14.8		
8 09.2 + 26 20		15.4		
8 10.1 + 24 42		15.6		double system
8 10.4 + 22 47		15.5		compact
8 10.4 + 25 16		15.5		
8 10.8 + 22 13		15.6		
8 11.1 + 24 00	2239*	15.3		
8 11.4 + 21 30	2545	13.2		
8 12.0 + 25 45		15.6		
8 12.4 + 26 17		15.6		
8 12.5 + 21 43		15.7		
8 13.0 + 23 20		15.2		
8 13.1 + 23 16	2248*	15.1		
8 13.4 + 26 09		15.7		
8 13.5 + 23 58		15.6		
8 13.6 + 21 34	2253*	15.0		
8 13.7 + 24 56	2254*	15.4		
8 13.9 + 24 19	2256*	15.2		
8 14.0 + 20 40		15.5		
8 14.5 + 21 19		15.5		
8 14.5 + 21 50		14.5		
8 14.6 + 21 20		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 14.7 +21 04	2553	15.0		
8 14.8 +23 37		15.7		
8 14.9 +23 37	2554	13.5		
8 15.0 +21 16		15.6		
8 15.0 +22 35		15.4		
8 15.0 +24 53	2267*	15.1		double nebula
8 15.1 +24 57	2268*	15.3		
8 15.2 +23 12	2269*	15.6		
8 15.4 +24 40	2271*	15.3		very compact
8 15.6 +20 56		15.6		
8 15.7 +20 55		15.3		
8 15.8 +24 41	501*	15.5		
8 16.0 +21 22		15.5		
8 16.0 +22 16		15.7		
8 16.2 +21 05	2556	15.5		
8 16.2 +21 20		15.0		
8 16.2 +21 57		15.2		
8 16.3 +21 36	2557	14.6		
8 16.3 +24 56	2282*=2283*	15.3		
8 16.4 +20 40	2558	14.6		
8 16.4 +20 55		15.5		very diffuse
8 16.4 +23 54	2288*	15.5		
8 16.5 +21 13		15.5		
8 16.7 +21 33	2293*	15.2		
8 16.8 +21 16		15.5		
8 16.8 +22 12		15.5		
8 16.9 +22 11	2565	13.8		
8 17.0 +21 08	2560	14.9		
8 17.1 +21 14		15.7		
8 17.1 +26 10		15.5		very diffuse
8 17.3 +21 14		15.5		
8 17.4 +21 02		15.5		extremely diffuse
8 17.5 +21 17	2562	14.0	+4963	
8 17.6 +26 04		15.0		
8 17.7 +21 14	2563	13.7	+4775	
8 17.9 +22 49		14.9		
8 18.5 +21 02	2569	15.3		
8 18.5 +21 05	2570	15.4		
8 18.6 +21 17		15.7		compact
8 19.0 +22 48		15.6		
8 19.1 +21 30		15.7		
8 19.4 +21 15		15.5		
8 19.4 +25 39		15.4		
8 19.8 +22 43	2577	13.8		
8 19.8 +24 27	2575	14.3		
8 19.9 +25 54	2576	15.4		
8 20.0 +21 15		15.4		
8 20.2 +22 49		14.6		
8 20.6 +25 10		15.7		
8 20.7 +21 30	2338*+2339*	14.7		double system
8 20.8 +21 36	2341*	14.9		
8 21.0 +21 08		15.6		
8 21.1 +21 12		14.8		
8 21.4 +26 19		15.5		
8 21.5 +20 42	2348*	15.6		
8 21.6 +21 13		15.7		
8 21.8 +22 55		15.6		
8 22.0 +25 57		15.7		
8 22.1 +26 04		15.7		double system

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 22.3	+ 25 10		15.6		
8 22.4	+ 20 30	2582=2359*	14.3		
8 23.2	+ 21 37		15.5		
8 23.2	+ 21 50		15.7		
8 23.4	+ 23 02		15.7		
8 23.4	+ 23 04		15.6		
8 23.6	+ 22 26		15.5		
8 23.6	+ 23 21		15.2		
8 23.7	+ 22 35		15.7		compact
8 23.7	+ 23 07		15.5		
8 24.0	+ 20 32	2373*	15.5		
8 24.1	+ 21 53		14.8		
8 24.1	+ 26 08	2592	13.6		
8 24.2	+ 21 49		15.0		
8 24.2	+ 23 00		15.4		
8 24.3	+ 23 02		14.5		
8 24.3	+ 26 02	2594	15.0		
8 24.5	+ 23 20		15.6		
8 24.5	+ 25 53		15.7		very diffuse
8 24.8	+ 21 39	2595	13.9		
8 24.8	+ 25 01		15.7		
8 25.4	+ 25 17	508*	14.8		
8 25.5	+ 25 10		15.6		
8 25.6	+ 23 14		15.6		double nebula
8 25.8	+ 22 14	2382*	14.9		
8 26.1	+ 25 56		15.7		
8 27.1	+ 21 40	2597=2598	15.1		
8 27.6	+ 21 20		15.7		
8 27.8	+ 20 47		15.7		
8 27.8	+ 24 47		15.7		
8 28.6	+ 22 12		15.4		
8 29.0	+ 24 10	509*	14.6		
8 29.2	+ 22 44	2599	13.4		
8 29.4	+ 24 42		15.7		
8 30.0	+ 26 11		15.5		
8 31.1	+ 22 23		15.7		
8 32.5	+ 23 42		14.7		
8 32.5	+ 25 12	2611	15.3		
8 32.6	+ 23 51		15.6		
8 33.1	+ 25 47		15.4		
8 33.2	+ 25 17		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2535	-	-	13.21	Sc	13.2	Sb	-	-
2536	-	-	14.69	Sb	-	-	-	-
2545	-	-	13.24	Sb	-	-	-	-
2562	-	-	14.02	Sa	14.0	Sa	-	-
2563	-	-	13.79	S0	13.7	S0	-	-



FIELD No. 120

8^h46^m $+23^\circ30'$

Survey Plate No. 1355

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
11829	8 35 09.8	+ 26 13 38	7.65
11849	8 35 49.2	+ 23 51 51	6.84
11982	8 40 23.7	+ 21 38 59	4.73
12310	8 51 58.1	+ 26 23 43	6.67
12342	8 53 17.3	+ 24 38 27	6.72
12362	8 54 12.0	+ 22 03 13	7.01

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0831.2 + 2100	compact	186	2.9	D	2
0832.6 + 2324	open	154	1.7	VD	1
0834.5 + 2307	open	158	4.7	MD	21
0836.6 + 2242	compact	90	1.2	ED	17
0837.0 + 2506	open	403	12.7	Near	9
0837.4 + 2245	compact	85	0.8	VD	16
0838.3 + 2305	medium compact	153	3.3	D	15
0844.0 + 2508	compact	87	1.4	VD	5
0844.7 + 2306	medium compact	272	6.5	MD	14
0845.1 + 2445	open	294	8.0	MD	4
0847.8 + 2348	compact	123	1.3	ED	13
0848.7 + 2552	compact	72	2.0	D	10
0850.1 + 2113	compact	155	2.1	D	11
0850.1 + 2239	compact	254	2.4	VD	12
0850.9 + 2416	open	207	7.6	MD	8
0851.8 + 2036	medium compact	136	1.4	ED	6
0855.0 + 2340	compact	150	1.3	ED	20
0856.5 + 2521	compact	144	1.5	ED	7
0857.9 + 2107	compact	71	1.9	VD	19
0858.0 + 2318	medium compact	149	1.6	ED	18
0858.1 + 2503	compact	186	2.3	VD	3

Average number of galaxies per cluster = 168.0

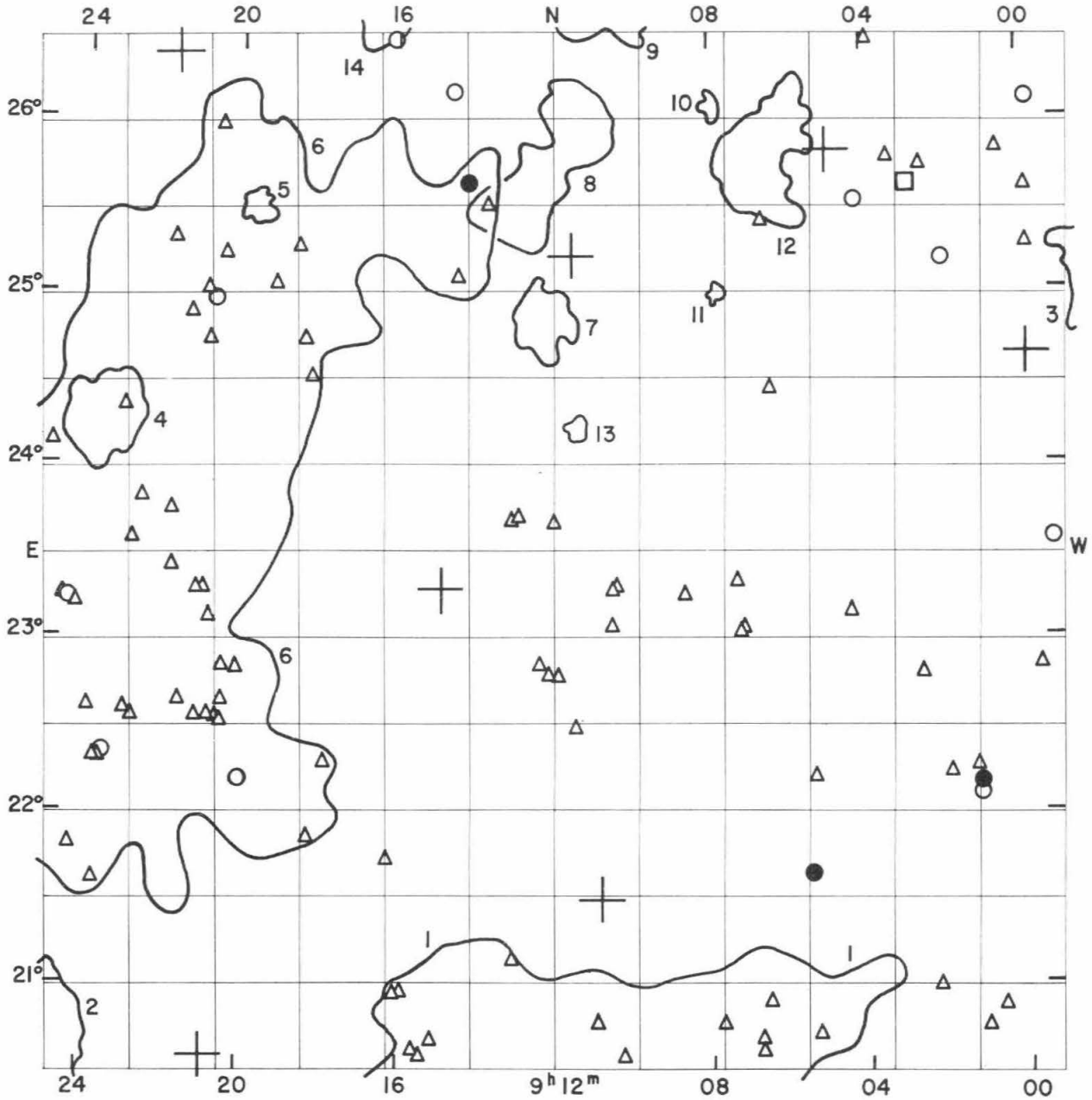
GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 33.1 + 25 47		15.4		
8 33.2 + 25 17		15.4		
8 33.4 + 23 57		15.7		compact
8 33.6 + 23 01		15.6		
8 33.7 + 25 19		15.7		
8 34.5 + 25 07	2620	14.8		
8 34.7 + 25 10	2621	15.4		
8 34.8 + 20 41		15.3		diffuse spiral
8 35.0 + 25 20		15.5		
8 35.1 + 25 30		15.3		double system
8 35.2 + 25 04		15.5		double system
8 35.2 + 25 27		15.3		compact
8 35.3 + 25 05	2622	14.8		
8 35.3 + 25 16		15.5		compact
8 35.4 + 25 56	2623	14.4	+ 5435	triple system, collision
8 36.0 + 26 19		15.6		triple system
8 36.2 + 26 24		15.4		compact
8 36.9 + 23 19		15.6		
8 37.0 + 23 35		15.7		
8 37.5 + 23 43	2628	14.1		
8 38.3 + 21 05		15.4		diffuse
8 38.5 + 25 25		15.4		
8 39.7 + 22 27		15.6		
8 39.9 + 25 15		15.5		extremely diffuse
8 40.1 + 25 43		15.6		
8 40.8 + 22 17		15.4		
8 42.1 + 22 47		15.5		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
8 42.2	+ 26 09		15.7		
8 42.6	+ 23 47		15.5		
8 42.6	+ 26 30		15.5		
8 42.7	+ 24 03		15.6		
8 43.6	+ 21 02		15.3		
8 44.0	+ 21 55		15.5		
8 44.7	+ 26 05		14.9		
8 44.8	+ 24 04		15.6		
8 45.0	+ 26 00		15.1		
8 45.5	+ 23 55		15.5		
8 45.5	+ 24 01		15.6		
8 46.3	+ 23 34		15.5		
8 47.2	+ 21 53		15.4		
8 47.4	+ 26 08		15.4		
8 47.9	+ 22 49		15.7		
8 48.3	+ 21 55		15.7		
8 49.3	+ 25 20		15.6		
8 49.8	+ 21 37		14.6		
8 50.5	+ 20 47		15.6		
8 50.8	+ 20 48		15.5		
8 50.9	+ 22 10		15.6		
8 51.4	+ 23 21		15.5		
8 51.7	+ 20 47		15.0		
8 53.0	+ 20 48		15.7		
8 53.6	+ 21 35		15.7		
8 54.2	+ 23 19		15.7		
8 54.4	+ 22 38		15.4		
8 55.1	+ 22 58		15.6		
8 57.5	+ 25 47		15.2		
8 58.2	+ 20 49		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2623	-	-	-	-	-	SBc	-	-



FIELD No. 121

9^h12^m $+23^o30'$

Survey Plate No. 237

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12496	8 59 49.1	+ 24 39 03	5.45
12592	9 04 57.5	+ 25 49 43	6.80
12722	9 10 46.1	+ 21 29 25	6.09
12737	9 11 33.3	+ 25 13 12	7.02
12815	9 14 53.3	+ 23 17 21	7.13
12951	9 20 58.1	+ 20 34 45	7.77
12972	9 21 44.8	+ 26 23 55	4.61

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0858.1 + 2503	compact	186	2.3	VD	3
0906.7 + 2546	medium compact	167	3.6	D	12
0907.8 + 2500	compact	51	0.5	ED	11
0907.9 + 2604	compact	54	0.7	ED	10
0909.7 + 1814	open	1306	31.7	Near	1
0910.8 + 2639	medium compact	144	2.3	VD	9
0911.4 + 2413	compact	64	0.7	ED	13
0912.1 + 2542	medium compact	225	3.8	D	8
0912.2 + 2448	medium compact	243	2.1	VD	7
0915.0 + 2744	open	245	9.2	MD	14
0919.6 + 2529	medium compact	80	0.9	ED	5
0921.6 + 2354	medium compact	636	16.2	Near	6
0923.5 + 2416	compact	249	2.7	VD	4
0925.0 + 2042	compact	315	3.3	VD	2

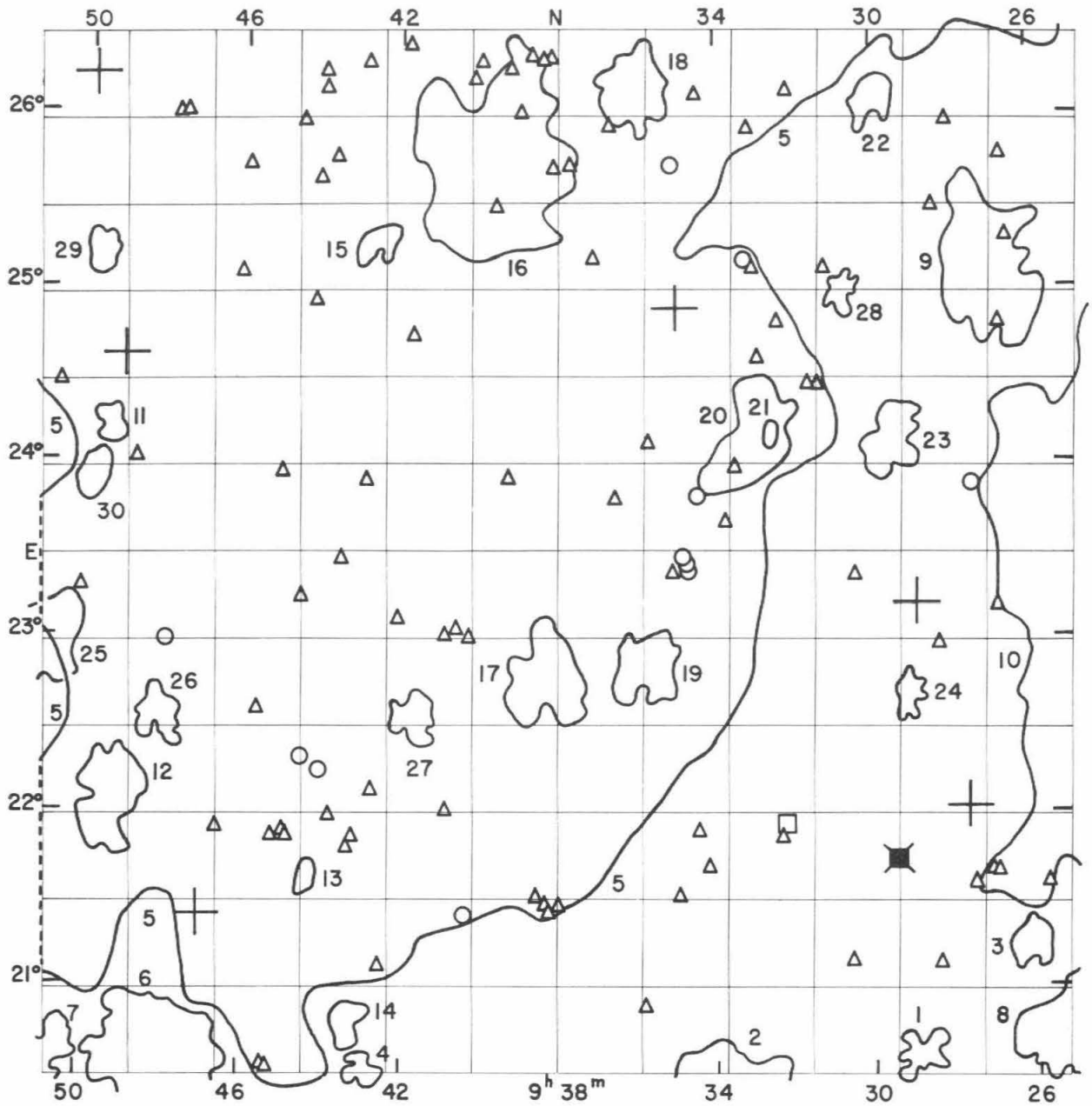
Average number of galaxies per cluster = 283.2

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
8 59.2 + 23 35		14.9		
8 59.6 + 22 51		15.5		compact
8 59.7 + 26 08	2735	14.2		double system, tidal effect
8 59.8 + 25 17		15.7		
8 59.8 + 25 36		15.3		
9 00.5 + 25 50		15.3		
9 00.6 + 20 51		15.4		
9 01.0 + 20 45		15.6		
9 01.1 + 22 06	2737	14.8		
9 01.1 + 22 10	2738	13.8		
9 01.2 + 22 15		15.4		
9 01.9 + 22 13		15.4		
9 02.0 + 25 12	2743	14.3		
9 02.2 + 20 59		15.7		
9 02.5 + 25 45		15.4		
9 02.6 + 22 48	2433*	15.4		
9 02.8 + 25 38	2750	12.7		
9 03.3 + 25 47		15.7		extremely diffuse
9 03.9 + 26 28	2435*	15.2		
9 04.2 + 25 32	2753	14.8		
9 04.4 + 23 09		15.5		
9 05.2 + 20 42		15.6		
9 05.3 + 22 11		15.4		double system
9 05.4 + 21 39	2764	13.9		
9 06.4 + 24 27		15.5		
9 06.5 + 20 55		15.1		
9 06.6 + 25 25		15.4		
9 06.7 + 20 37		15.5		
9 06.7 + 20 41		15.6		
9 07.1 + 23 03	2441*	15.3		double nebula, connected
9 07.2 + 23 02	2442*	15.2		
9 07.3 + 23 19		15.7		
9 07.7 + 20 46		15.4		double nebula
9 08.6 + 23 15		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 10.2 +20 35		15.3		diffuse
9 10.4 +23 18		15.5		
9 10.5 +23 04		15.7		diffuse
9 10.5 +23 17		15.3		double system
9 10.9 +20 46		15.4		
9 11.4 +22 29		15.5		
9 11.9 +22 47		15.7		
9 12.0 +23 40		15.6		
9 12.1 +22 48		15.6		
9 12.3 +22 51		15.7		
9 12.8 +23 42	2451*	15.7		
9 13.0 +21 09	2453*	15.5		
9 13.0 +23 40	2452*	15.6		
9 13.6 +25 30		15.7		
9 14.1 +25 38		14.0		
9 14.4 +25 05		15.4		
9 14.5 +26 10		14.4		
9 15.1 +20 41		15.6		
9 15.4 +20 35		15.7		
9 15.6 +20 37		15.7		
9 15.9 +20 57		15.6		
9 16.0 +20 56		15.6		
9 16.1 +26 29	2824	14.3		
9 16.2 +21 44		15.7		
9 17.8 +22 17		15.1		
9 18.1 +24 31		15.2		
9 18.2 +21 51		15.7		diffuse
9 18.4 +24 44		15.4		very compact
9 18.5 +25 17		15.7		
9 19.1 +25 03		15.7		
9 20.0 +22 12		15.0		
9 20.1 +22 50	2463*	15.7		
9 20.4 +25 15		15.5		compact
9 20.5 +22 32		15.2		double system
9 20.5 +22 40	2465*	15.7		
9 20.5 +22 50	2464*	15.4		
9 20.5 +25 59		15.5		
9 20.6 +22 33		15.1		
9 20.6 +24 58		14.9		
9 20.8 +22 34		15.7		
9 20.8 +23 08		15.5		
9 20.8 +24 44		15.5		
9 20.9 +25 01		15.6		
9 21.0 +23 18		15.7		
9 21.2 +22 33		15.5		double system
9 21.2 +23 18		15.7		
9 21.3 +24 53		15.7		
9 21.6 +22 39		15.6		
9 21.7 +23 25		15.6		
9 21.7 +25 20	536*	15.3		
9 21.8 +23 45		15.2		
9 22.5 +23 50		15.6		
9 22.8 +22 33		15.1		double system
9 22.8 +23 35		15.6		
9 23.0 +22 36		15.6		double nebula, connected
9 23.0 +24 21		15.7		
9 23.5 +22 21		15.0		
9 23.6 +22 18		15.7		
9 23.7 +21 36	2472*	15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 23.8 +22 18		15.5		
9 23.9 +22 37		15.7		
9 24.2 +23 12		15.5		
9 24.3 +21 49		15.6		
9 24.4 +23 14	2474*	14.8		
9 24.5 +23 15		15.6		
9 24.9 +24 09		15.4		



FIELD No. 122

9^h38^m $+23^\circ30'$

Survey Plate No. 25

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
13105	9 27 33.5	+ 22 02 00	6.81
13143	9 28 52.3	+ 23 11 22	4.48
13291	9 34 58.5	+ 24 53 45	6.60
13528	9 47 02.4	+ 21 24 48	6.01
13569	9 49 03.0	+ 24 37 58	5.33
13590	9 49 55.4	+ 26 14 36	4.10

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0921.6 + 2354	medium compact	636	16.2	Near	10
0925.0 + 2042	compact	315	3.3	VD	8
0926.1 + 2115	compact	105	1.3	VD	3
0926.9 + 2506	open	142	4.0	D	9
0928.8 + 2034	medium compact	103	1.4	ED	1
0929.1 + 2240	medium compact	100	1.1	ED	24
0929.5 + 2407	medium compact	95	2.0	VD	23
0929.9 + 2605	medium compact	59	1.4	VD	22
0930.7 + 2459	compact	115	1.0	ED	28
0932.6 + 2410	compact	61	0.5	ED	21
0933.0 + 2406	medium compact	102	2.7	VD	20
0933.2 + 2022	medium compact	101	3.0	MD	2
0935.7 + 2251	medium compact	201	2.2	VD	19
0936.0 + 2609	medium compact	92	2.3	VD	18
0938.2 + 2246	medium compact	128	2.7	VD	17
0939.6 + 2541	open	211	5.6	D	16
0941.6 + 2233	medium compact	108	1.4	VD	27
0941.7 + 2430	open	770	33.6	Near	5
0942.6 + 2517	medium compact	125	1.2	ED	15
0942.7 + 2030	compact	60	1.0	ED	4
0943.2 + 2047	compact	67	1.2	VD	14
0944.3 + 2138	medium compact	66	0.8	ED	13
0948.0 + 2036	medium compact	252	3.8	D	6
0948.0 + 2235	medium compact	106	1.4	VD	26
0949.1 + 2205	medium compact	158	2.5	VD	12
0949.4 + 2413	compact	80	1.0	ED	11
0949.6 + 2513	medium compact	74	1.1	ED	29
0949.8 + 2355	medium compact	99	1.4	ED	30
0950.8 + 2258	compact	219	2.4	VD	25
0951.5 + 2037	medium compact	207	3.3	VD	7

Average number of galaxies per cluster = 165.2

GALAXIES

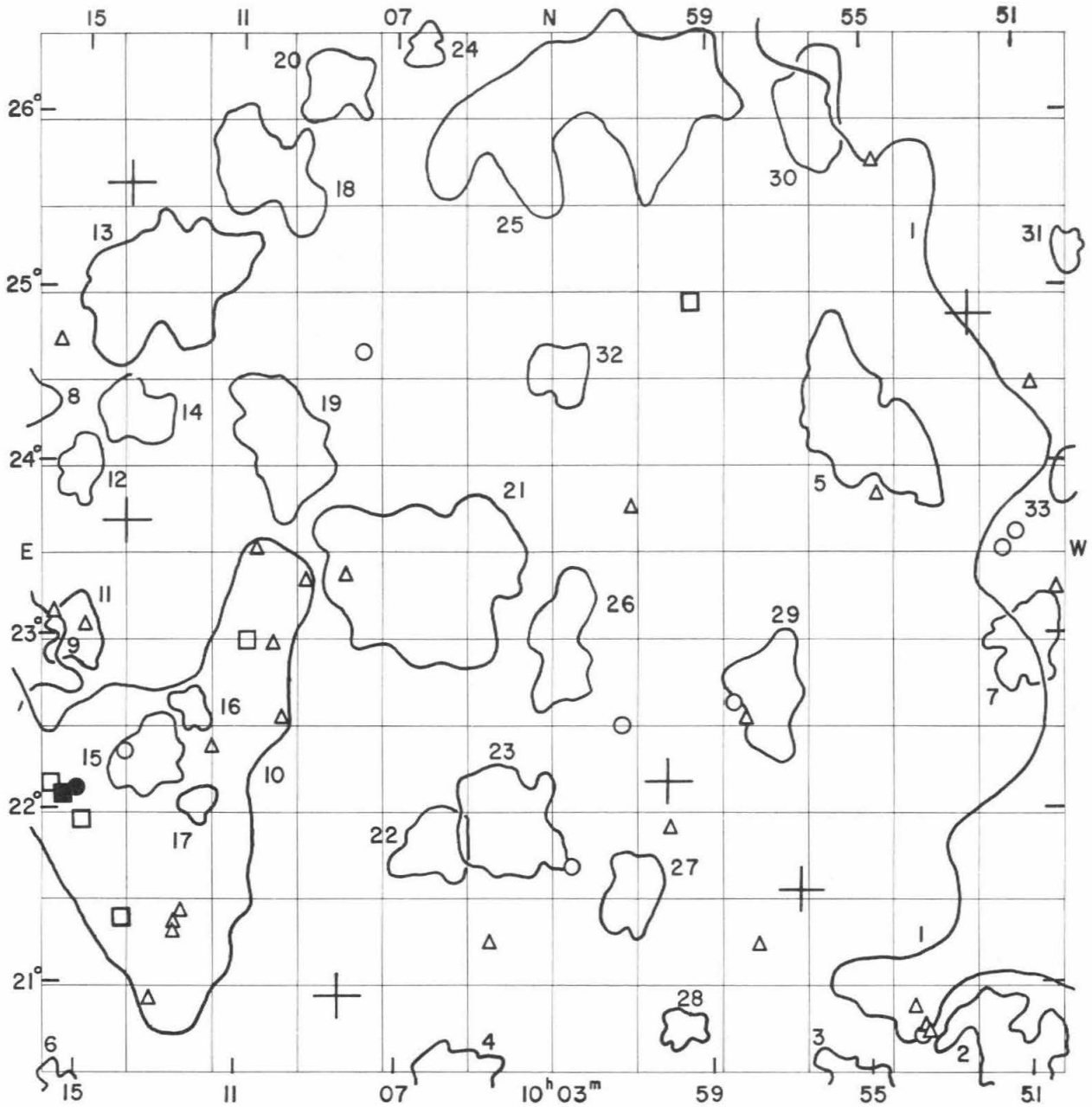
Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
9 25.7 + 21 35		15.6		
9 26.6 + 25 18		15.7		
9 26.6 + 25 46		15.2		double system
9 26.8 + 24 49		15.6		
9 26.9 + 21 39		15.5		
9 26.9 + 23 10		15.5		
9 27.0 + 21 40		15.4		triple system
9 27.5 + 21 35		15.6		
9 27.5 + 23 53	2896	14.8		
9 28.0 + 25 58		15.6		
9 28.3 + 22 58		15.7		
9 28.4 + 21 08		15.6		
9 28.4 + 25 28		15.1		
9 29.4 + 21 44	2903=2905	9.8	+ 644	
9 30.4 + 23 21		15.3		
9 30.6 + 21 10		15.6		
9 31.1 + 25 07		15.7		
9 31.3 + 24 26		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 31.6 +24 26		15.5		
9 32.0 +26 09		15.5		
9 32.1 +21 56	2916	12.3		
9 32.3 +21 52		15.6		
9 32.4 +24 49		15.6		
9 32.9 +24 36		15.6		
9 33.0 +25 07	544*	15.3		
9 33.1 +25 55		15.5		double nebula
9 33.2 +25 10	545*	14.8		
9 33.5 +23 58		15.4		
9 33.7 +23 40		15.6		double nebula
9 34.1 +21 42		15.4		compact
9 34.4 +21 54		15.7		
9 34.4 +23 49	2927	14.1		
9 34.5 +26 07		15.5		
9 34.6 +23 23	2929	14.4		
9 34.7 +23 26	2930	14.7		
9 34.8 +23 28	2931	14.9		
9 34.9 +21 31		15.7		very diffuse
9 35.0 +25 43		14.3		
9 35.1 +23 22		15.5		double system
9 35.7 +24 07		15.3		
9 35.8 +20 53		15.7		diffuse spiral
9 36.5 +23 48		15.6		double system, collision
9 36.7 +25 56		15.6		
9 37.0 +25 10		15.3		
9 37.7 +25 43		15.4		
9 38.0 +21 28		15.4		
9 38.1 +25 41		15.4		
9 38.1 +26 19		15.7		
9 38.2 +21 25		15.7		
9 38.3 +21 27		15.2		
9 38.3 +26 18		15.6		
9 38.6 +21 31		15.5		
9 38.6 +26 20		15.6		
9 38.9 +26 01		15.6		
9 39.2 +23 55		15.3		
9 39.2 +26 16		15.7		diffuse
9 39.6 +25 28		15.6		
9 39.9 +26 18		15.7		
9 40.1 +26 13		15.7		
9 40.2 +23 00		15.5		
9 40.3 +21 25		14.8		
9 40.5 +23 03		15.6		
9 40.8 +22 01		15.7		
9 40.8 +23 01		15.6		double system
9 41.7 +24 44		15.5		
9 41.8 +26 25		15.6		
9 42.0 +23 08		15.5		
9 42.5 +21 08		15.5		double system
9 42.7 +22 08		15.6		
9 42.8 +23 55		15.5		
9 42.8 +26 19		15.7		
9 43.1 +21 52		15.7		
9 43.2 +21 49		15.7		diffuse
9 43.5 +23 27		15.7		
9 43.6 +25 46		15.6		diffuse
9 43.8 +22 00		15.5		
9 43.9 +26 10		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 44.0 +22 15	2988+2991	14.3		double system
9 44.0 +25 38		15.7		
9 44.0 +26 15		15.6		diffuse
9 44.1 +24 56		15.4		
9 44.4 +22 20	2994	14.4		
9 44.5 +23 15		15.7		
9 44.5 +25 59		15.6		
9 44.8 +21 53		15.7		diffuse
9 44.9 +21 55		15.6		
9 45.0 +23 57		15.1		
9 45.2 +20 33		15.2		
9 45.2 +21 53		15.6		
9 45.3 +20 33		15.6		compact
9 45.6 +22 36		15.7		
9 45.9 +25 43		15.5		double system, tidal effect
9 46.0 +25 06		15.4		
9 46.6 +21 55		15.5		
9 47.5 +26 01		15.6		
9 47.7 +26 01		15.6		
9 47.9 +22 59		15.0		
9 48.7 +24 02		15.5		
9 50.1 +23 17		15.5		
9 50.7 +24 28		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2903	9.5	Sc	9.86	Sc	9.7	Sc	9.48	Sc-



FIELD No. 123

10^h03^m $+23^\circ30'$

Survey Plate No. 1352

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
13633	9 52 16.1	+ 24 52 33	7.16
13740	9 56 41.3	+ 21 33 40	6.61
13796	10 00 01.9	+ 22 11 28	5.59
13988	10 08 22.6	+ 20 56 42	6.63
14106	10 13 54.5	+ 25 37 15	6.01
14107	10 13 54.8	+ 23 40 02	3.65

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0941.7 + 2430	open	770	33.6	Near	1
0949.6 + 2513	medium compact	74	1.1	ED	31
0949.8 + 2355	medium compact	99	1.4	ED	33
0950.8 + 2258	compact	219	2.4	VD	7
0951.5 + 2037	medium compact	207	3.3	VD	2
0954.8 + 2016	open	120	2.9	VD	3
0955.0 + 2413	medium compact	242	4.4	D	5
0956.3 + 2602	medium compact	116	2.8	D	30
0957.6 + 2241	medium compact	222	2.9	ED	29
0959.8 + 2045	compact	182	1.2	ED	28
1001.0 + 2131	medium compact	135	2.1	ED	27
1002.2 + 2606	medium compact	437	6.3	MD	25
1002.7 + 2432	medium compact	144	2.0	ED	32
1002.8 + 2259	medium compact	150	2.9	VD	26
1004.2 + 2157	compact	186	3.6	VD	23
1005.5 + 2025	medium compact	121	2.4	VD	4
1006.0 + 2149	compact	155	2.2	VD	22
1006.3 + 2320	open	188	5.6	MD	21
1006.4 + 2625	compact	94	1.2	ED	24
1008.6 + 2612	medium compact	112	2.2	VD	20
1009.9 + 2409	compact	198	3.5	VD	19
1010.4 + 2540	open	155	3.5	D	18
1011.9 + 2203	medium compact	75	1.1	VD	17
1012.1 + 2236	medium compact	108	1.3	ED	16
1013.0 + 2502	medium compact	266	4.5	MD	13
1013.2 + 2219	open	123	2.2	VD	15
1013.7 + 2416	open	166	2.2	D	14
1014.1 + 2215	open	194	9.9	Near	10
1015.0 + 2357	medium compact	118	1.8	VD	12
1015.1 + 2301	compact	177	2.0	VD	11
1015.4 + 2025	medium compact	95	1.1	VD	6
1017.0 + 2419	open	111	2.8	VD	8
1017.2 + 2307	medium compact	197	5.3	MD	9

Average number of galaxies per cluster = 180.5

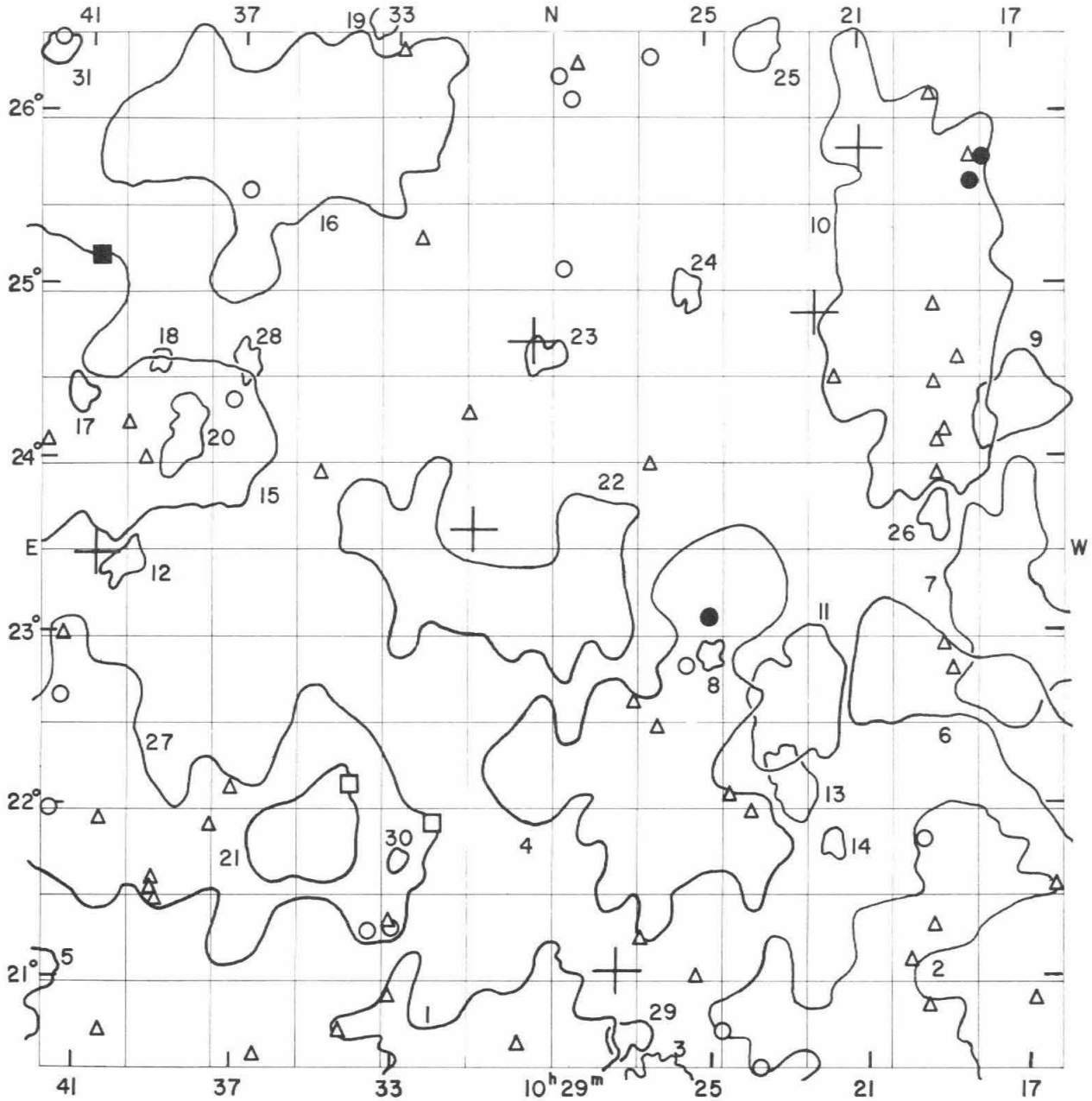
GALAXIES

Position α 1950 δ (h m o ′)	NGC IC*	m_p	V_s km/sec	Remarks
9 50.1 + 23 17		15.5		
9 50.7 + 24 28		15.4		
9 51.1 + 23 37		14.5		
9 51.5 + 23 31		14.6		
9 53.5 + 20 44		15.5		
9 53.6 + 20 45		15.7		
9 53.7 + 20 43		14.4		double nebula
9 53.9 + 20 53		15.5		
9 54.7 + 23 50		15.7		diffuse spiral
9 54.7 + 25 45		15.4		
9 57.8 + 21 14		15.7		
9 58.0 + 22 33		15.4		
9 58.3 + 22 38	3088	14.7		double system, contact
9 59.4 + 24 57	3098	13.0		m_H = 13.0
10 00.0 + 21 55		15.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
10 00.9 + 23 46		15.7		
10 01.2 + 22 31		14.5		double system
10 02.5 + 21 42		14.8		
10 04.5 + 21 15		15.7		
10 07.9 + 24 40	2551*	14.6		
10 08.2 + 23 22		15.5		
10 09.3 + 23 20		15.3		
10 09.8 + 22 32		15.6		compact
10 10.1 + 22 58		15.7		
10 10.6 + 23 30		15.6		
10 10.8 + 22 59	3162	12.2	+ 1456	m_H = 12.3 S
10 11.6 + 22 22		15.7		
10 12.3 + 21 25		15.4		
10 12.5 + 21 18		15.7		
10 12.5 + 21 21		15.5		very faint jets
10 13.1 + 20 55		15.6		diffuse
10 13.8 + 21 22	3177	12.8	+ 1220	m_H = 12.8 E
10 13.8 + 22 20		15.0		
10 14.9 + 21 56	3185	12.9	+ 1241	m_H = 12.7 S
10 14.9 + 23 03		15.3		
10 15.1 + 22 07	3187	13.8		
10 15.4 + 22 05	3189=3190	11.9	+ 1350	m_H = 12.1 Sb
10 15.7 + 22 09	3193	12.4	+ 1371	m_H = 12.6 E
10 15.7 + 23 08		15.5		
10 15.7 + 24 42		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3162	-	-	-	-	-	Sc	-	-
3177	-	-	-	-	-	Sb	-	-
3185	12.9	S	13.10	SBa	13.1	SBa	12.90	Sa
3187	-	-	-	-	-	-	13.62	S
3190	11.6	Sb	12.16	Sb	12.1	Sa	11.96	Sa
3193	12.2	E	12.20	E2	12.2	E2	11.83	E



FIELD No. 124

10^h29^m $+23^\circ30'$

Survey Plate No. 1380

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
14273	10 21 02.5	+ 25 49 20	6.87
14297	10 22 15.5	+ 24 52 08	8.2
14425	10 27 22.5	+ 21 03 30	8.4
14469	10 29 32.2	+ 24 42 00	7.16
14510	10 31 02.9	+ 23 36 32	7.10
14740	10 40 42.0	+ 23 27 02	5.05

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1014.1 + 2215	open	194	9.9	Near	6
1017.0 + 2419	open	111	2.8	VD	9
1017.2 + 2307	medium compact	197	5.3	MD	7
1019.2 + 2341	compact	76	1.1	ED	26
1019.4 + 2501	medium compact	266	8.9	Near	10
1020.1 + 2046	open	256	8.1	Near	2
1021.8 + 2147	compact	53	0.7	ED	14
1022.7 + 2236	medium compact	120	3.6	MD	11
1022.8 + 2209	compact	117	1.6	ED	13
1023.6 + 2624	compact	134	1.5	ED	25
1024.9 + 2254	compact	72	0.7	ED	8
1025.5 + 2500	medium compact	121	1.0	ED	24
1026.0 + 2022	medium compact	91	1.8	MD	3
1026.2 + 2215	open	248	8.7	Near	4
1027.0 + 2041	compact	98	1.2	ED	29
1029.1 + 2436	compact	96	1.1	ED	23
1029.8 + 2023	open	226	7.4	Near	1
1030.2 + 2314	open	323	6.3	MD	22
1032.8 + 2142	medium compact	63	0.6	ED	30
1033.5 + 2632	compact	99	0.8	ED	19
1035.1 + 2149	open	127	3.4	D	21
1035.8 + 2551	open	282	8.4	MD	16
1036.8 + 2434	compact	79	1.0	ED	28
1037.4 + 2156	open	170	9.4	Near	27
1038.4 + 2408	medium compact	90	1.7	VD	20
1039.0 + 2434	compact	57	0.6	ED	18
1039.8 + 2324	compact	84	1.2	ED	12
1041.0 + 2423	medium compact	83	0.9	ED	17
1041.9 + 2622	compact	82	1.0	ED	31
1042.7 + 2041	medium compact	126	3.6	MD	5
1048.6 + 2358	open	770	17.5	Near	15

Average number of galaxies per cluster = 158.4

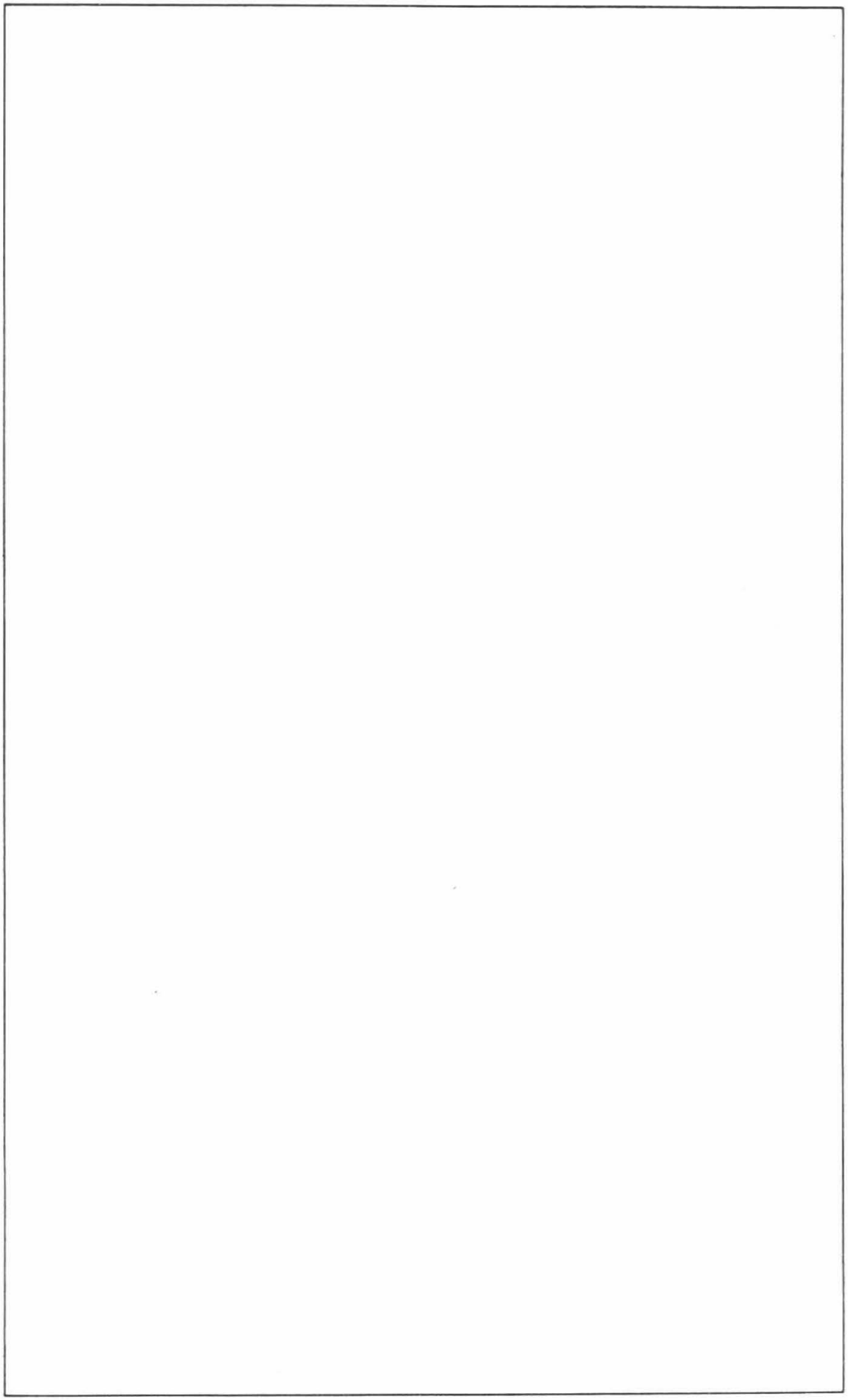
GALAXIES

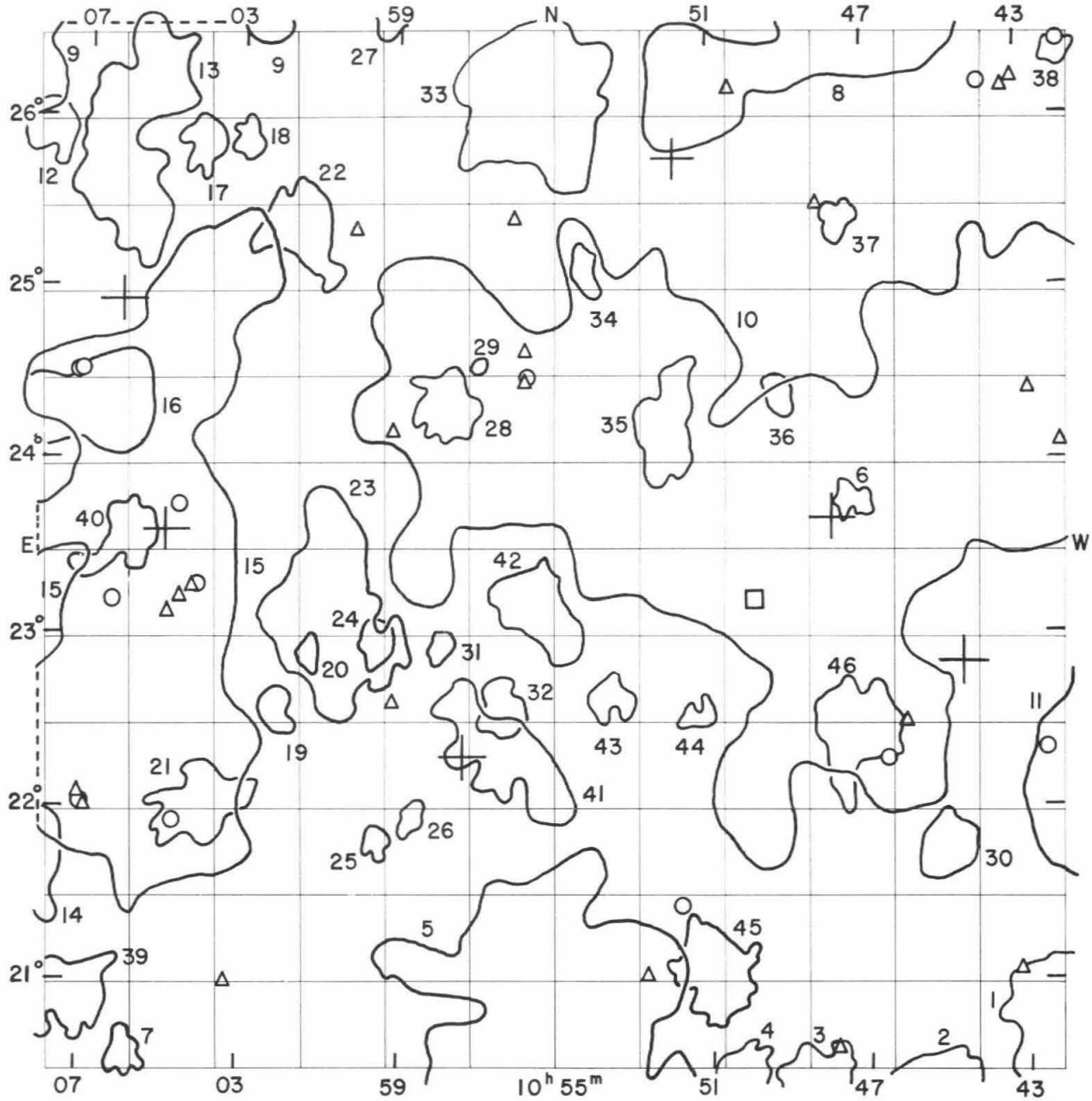
Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
10 16.3 + 21 32		15.3		
10 16.8 + 20 53		15.7		
10 17.8 + 25 45	3209	13.9		
10 18.1 + 25 37		14.0		
10 18.2 + 25 46		15.2		
10 18.6 + 24 36		15.3		
10 18.8 + 22 48		15.7		diffuse
10 18.9 + 24 10	3216	15.1		
10 19.0 + 22 56		15.7		
10 19.1 + 23 55		15.7		
10 19.1 + 24 07		15.5		
10 19.2 + 24 27		15.6		
10 19.2 + 24 55	2567*	15.7		
10 19.2 + 26 08		15.4		
10 19.4 + 21 20		15.7		
10 19.5 + 20 51		15.5		
10 19.6 + 21 50	3221	14.3		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
10 20.0	+ 21 07		15.2		
10 21.7	+ 24 30		15.4		
10 23.8	+ 20 29	611*	14.8		
10 24.0	+ 21 59		15.5		compact
10 24.5	+ 22 05		15.6		diffuse double system
10 24.8	+ 24 43		15.0		
10 25.0	+ 23 06	3248	13.9		
10 25.4	+ 21 02		15.7		
10 25.6	+ 22 50		14.9		
10 26.3	+ 22 28		15.4		
10 26.5	+ 23 59		15.5		
10 26.5	+ 26 21	2579*	14.2		
10 26.8	+ 21 15		15.6		
10 27.0	+ 22 37		15.3		
10 28.4	+ 26 18	2583*	15.1		
10 28.5	+ 26 06		15.0		
10 28.7	+ 25 07	3270	14.1		
10 28.8	+ 26 14		15.0		
10 29.8	+ 20 38		15.6		compact
10 31.1	+ 24 17		15.6		
10 32.0	+ 21 55	3287	12.9		m_H = 12.8 S
10 32.4	+ 25 18		15.7		
10 33.0	+ 21 19		14.9		
10 33.0	+ 26 23		15.3		
10 33.1	+ 20 55		15.5		
10 33.1	+ 21 21		15.6		compact
10 33.6	+ 21 17		14.9		
10 34.2	+ 22 09	3301	12.2	+ 1333	m_H = 12.4 Sa
10 34.3	+ 20 43		15.4		double system
10 34.9	+ 23 56		15.6		
10 36.5	+ 20 34		15.6		
10 36.9	+ 25 35	3323	14.3		
10 37.1	+ 22 07		15.7		
10 37.2	+ 24 21	3327	14.2		
10 37.6	+ 21 53		15.4		very diffuse spiral
10 38.9	+ 21 28		15.6		
10 39.0	+ 21 35		15.1		
10 39.1	+ 21 31		15.5		
10 39.4	+ 24 00		15.1		
10 39.9	+ 24 13		15.2		
10 40.3	+ 20 41		15.1		
10 40.4	+ 21 55		15.6		diffuse spiral
10 40.7	+ 25 10	3344	11.1	+ 579	m_H = 11.9 SBc
10 41.5	+ 22 38	3352	14.1		
10 41.5	+ 22 59		15.2		
10 41.8	+ 21 59		14.9		
10 41.9	+ 26 27		15.0		
10 42.0	+ 24 06		15.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3301	-	-	12.38	Sa	12.2	Sa	-	-
3344	-	-	10.66	Sc	10.4	Sc	10.38	Sc-





FIELD No. 125

10^h55^m $+23^\circ30'$

Survey Plate No. 1366

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14840	10 44 34.5	+ 22 50 21	8.2
14907	10 47 54.3	+ 23 40 17	6.60
14999	10 51 59.5	+ 25 45 27	6.18
15108	10 57 21.7	+ 22 17 42	7.20
15302	11 04 59.3	+ 23 35 40	6.39
15319	11 06 08.3	+ 24 55 46	5.63

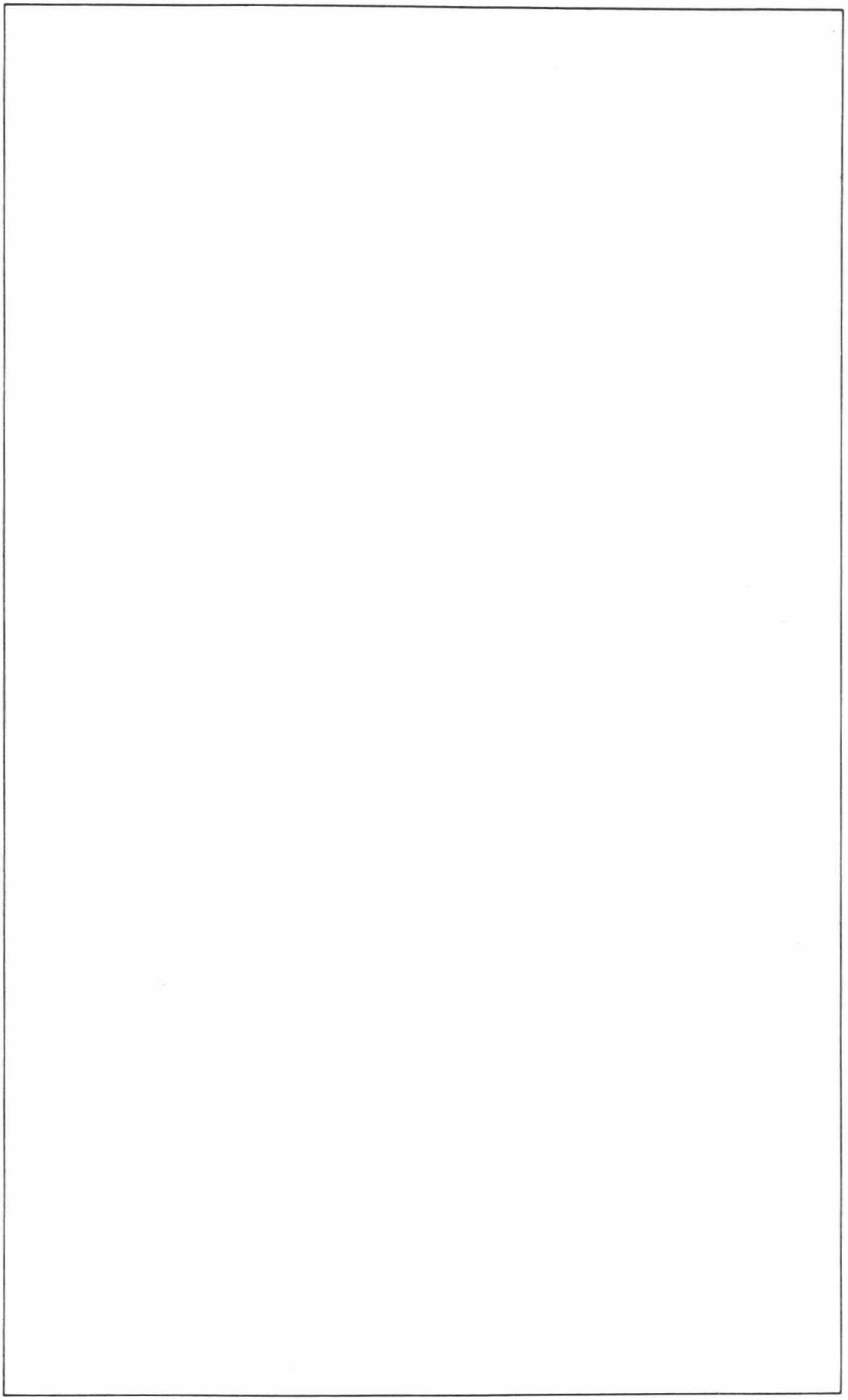
CLUSTERS OF GALAXIES

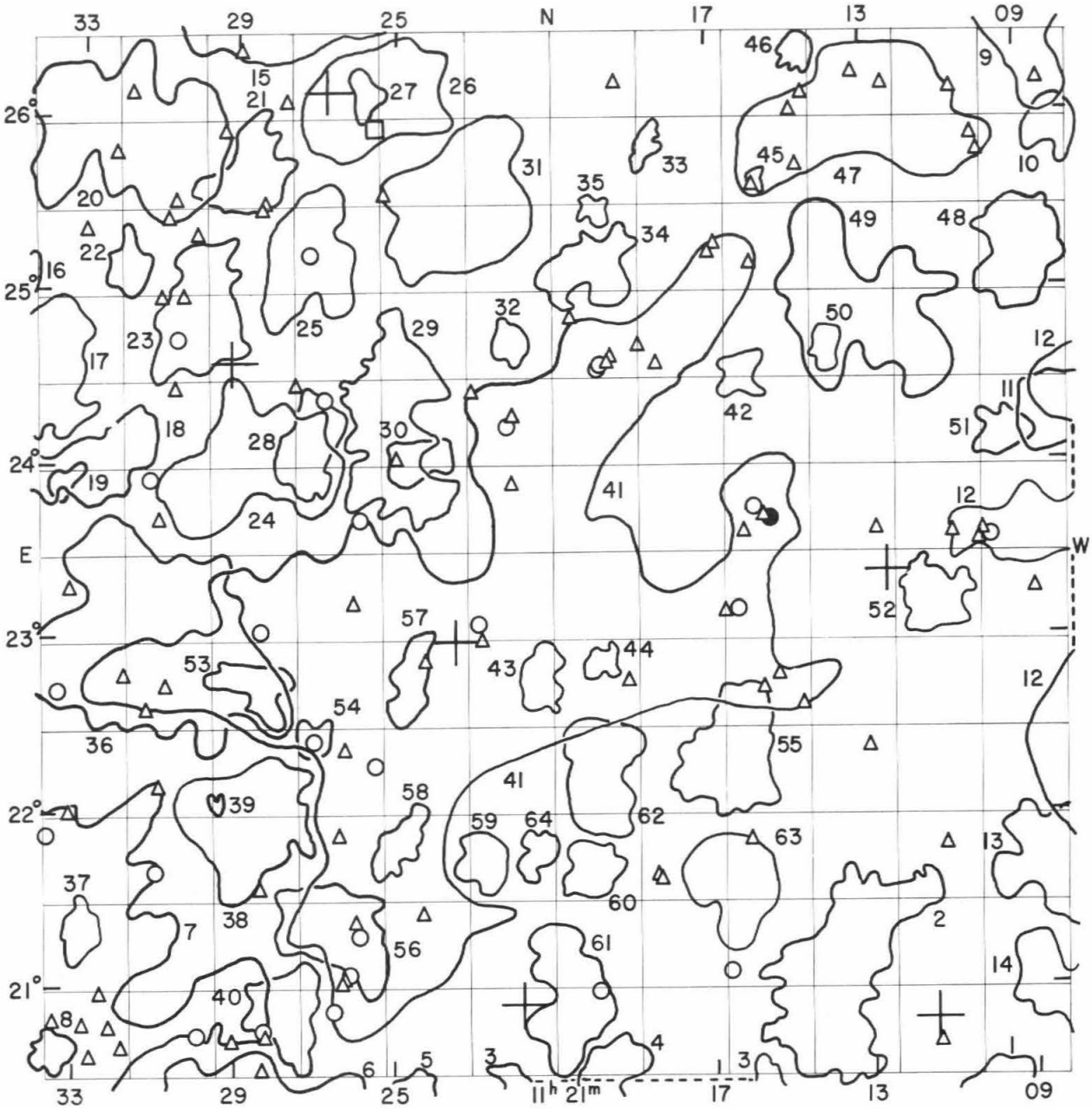
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1037.4 + 2156	open	170	9.4	Near	11
1041.9 + 2622	compact	82	1.0	ED	38
1042.7 + 2041	medium compact	126	3.6	MD	1
1045.0 + 2146	open	91	2.1	D	30
1045.7 + 2010	open	125	3.3	MD	2
1046.8 + 2747	open	412	15.4	Near	8
1047.3 + 2227	medium compact	147	2.9	D	46
1047.4 + 2346	medium compact	89	1.1	VD	6
1047.6 + 2524	medium compact	103	1.2	ED	37
1048.4 + 2025	medium compact	170	2.2	MD	3
1048.6 + 2358	open	770	17.5	Near	10
1049.2 + 2422	medium compact	56	1.1	ED	36
1050.1 + 2027	compact	107	1.6	D	4
1051.0 + 2104	open	105	2.7	D	45
1051.4 + 2231	compact	80	0.9	ED	44
1052.1 + 2411	medium compact	140	2.5	D	35
1053.5 + 2238	medium compact	91	1.2	ED	43
1054.2 + 2505	medium compact	134	1.2	ED	34
1054.6 + 2017	medium compact	1134	11.2	MD	5
1055.4 + 2308	compact	173	2.5	ED	42
1055.5 + 2606	open	356	4.9	D	33
1056.2 + 2219	medium compact	149	3.6	MD	41
1056.4 + 2235	compact	157	1.6	ED	32
1057.0 + 2432	compact	63	0.5	ED	29
1057.7 + 2418	medium compact	107	2.1	VD	28
1057.9 + 2256	compact	108	0.8	ED	31
1058.7 + 2156	compact	70	0.8	ED	26
1059.3 + 2634	medium compact	96	1.2	VD	27
1059.5 + 2148	medium compact	67	0.8	ED	25
1059.5 + 2257	compact	116	1.2	ED	24
1100.7 + 2308	open	250	4.8	D	23
1101.2 + 2253	compact	102	0.8	ED	20
1101.4 + 2521	medium compact	166	2.7	VD	22
1102.1 + 2233	compact	90	1.2	VD	19
1103.0 + 2550	medium compact	94	1.2	VD	18
1103.9 + 2201	medium compact	157	2.6	D	21
1104.0 + 2549	medium compact	103	1.5	D	17
1105.3 + 2835	medium compact	1090	21.0	Near	9
1105.6 + 2323	medium compact	723	11.7	Near	15
1105.9 + 2034	medium compact	73	1.2	VD	7
1106.0 + 2334	medium compact	118	2.1	ED	40
1106.1 + 2551	medium compact	442	4.6	MD	13
1107.1 + 2417	medium compact	307	4.0	MD	16
1107.8 + 2056	medium compact	265	3.2	D	39
1108.0 + 2555	medium compact	145	1.7	VD	12
1108.5 + 2142	medium compact	255	3.3	MD	14

Average number of galaxies per cluster = 216.8

GALAXIES

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
10	41.9	+ 26	27		15.0		
10	42.0	+ 24	06		15.7		
10	42.5	+ 22	20	3363	14.7		
10	42.8	+ 24	25		15.2		
10	43.1	+ 26	13		15.2		compact
10	43.3	+ 21	04		15.5		
10	43.4	+ 26	10		15.5		
10	44.0	+ 26	12		15.0		
10	46.0	+ 22	29		15.7		
10	46.5	+ 22	17		14.9		
10	47.8	+ 20	37		15.4		
10	48.2	+ 25	30		15.4		
10	49.9	+ 23	12	3437	12.6		m_H = 12.6 Sc
10	50.5	+ 26	10		15.6		
10	51.8	+ 21	26		15.0		
10	52.7	+ 21	02		15.5		
10	55.7	+ 24	30	3475	14.6		
10	55.8	+ 24	28		15.7		very compact
10	55.8	+ 24	38		15.1		
10	56.0	+ 25	25		15.4		
10	59.1	+ 24	11		15.7		
10	59.2	+ 22	37		15.2		
11	00.1	+ 25	20		15.6		
11	03.4	+ 21	00		15.5		compact
11	04.1	+ 23	18		14.9		
11	04.2	+ 23	17		15.7		diffuse spiral
11	04.6	+ 23	13		15.4		compact + diffuse companion
11	04.6	+ 23	45		14.4		
11	04.7	+ 21	56		14.8		
11	04.9	+ 23	08		15.1		
11	06.3	+ 23	12		14.7		
11	06.9	+ 22	01		15.7		double system
11	07.0	+ 22	02		14.8		
11	07.1	+ 22	05		15.7		
11	07.1	+ 24	32		14.5		
11	07.2	+ 24	31		14.6		





FIELD No. 126

11^h21^m $+23^\circ30'$

Survey Plate No. 1353

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
15438	11 11 27.1	+ 20 47 52	2.58
15460	11 12 32.9	+ 23 22 06	4.87
15662	11 21 51.1	+ 20 53 45	8.2
15691	11 23 31.1	+ 22 58 58	7.22
15758	11 26 46.3	+ 26 08 59	8.7
15814	11 29 14.1	+ 24 35 15	7.18

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1105.3 + 2835	medium compact	1090	21.0	Near	9
1105.6 + 2323	medium compact	723	11.7	Near	12
1107.1 + 2417	medium compact	307	4.0	MD	11
1107.8 + 2056	medium compact	265	3.2	D	14
1108.0 + 2555	medium compact	145	1.7	VD	10
1108.5 + 2142	medium compact	255	3.3	MD	13
1109.0 + 2513	medium compact	128	3.0	D	48
1109.5 + 2410	medium compact	85	1.5	ED	51
1110.0 + 2023	compact	160	1.9	VD	1
1111.4 + 2313	medium compact	106	2.2	D	52
1112.9 + 2600	open	98	5.5	Near	47
1113.0 + 2452	open	242	5.0	MD	49
1114.0 + 2102	open	295	4.7	D	2
1114.0 + 2439	open	98	1.2	ED	50
1114.6 + 2621	medium compact	112	1.1	ED	46
1115.7 + 2538	compact	56	0.5	ED	45
1116.2 + 2430	open	110	1.4	ED	42
1116.5 + 2136	medium compact	137	3.1	D	63
1116.6 + 2220	medium compact	225	3.5	D	55
1118.6 + 2550	medium compact	112	1.1	ED	33
1119.8 + 2031	medium compact	117	2.1	VD	4
1119.8 + 2252	medium compact	83	1.0	VD	44
1119.9 + 2214	medium compact	199	3.1	MD	62
1119.9 + 2528	compact	63	0.9	ED	35
1120.0 + 2142	compact	157	1.7	D	60
1120.0 + 2508	open	95	2.3	D	34
1120.2 + 1948	compact	933	8.6	MD	3
1120.6 + 2058	open	155	3.3	D	61
1121.3 + 2247	compact	136	1.7	VD	43
1121.4 + 2147	compact	159	1.3	VD	64
1122.1 + 2442	compact	130	1.2	ED	32
1122.8 + 2145	medium compact	112	1.7	VD	59
1123.4 + 2530	medium compact	295	4.7	D	31
1123.5 + 2256	open	350	14.9	Near	41
1124.5 + 2401	compact	174	1.7	ED	30
1124.6 + 2246	open	120	1.9	VD	57
1124.7 + 2010	medium compact	195	2.5	VD	5
1125.0 + 2150	medium compact	106	1.7	ED	58
1125.1 + 2413	medium compact	292	3.9	D	29
1125.5 + 2759	open	673	13.7	Near	15
1125.6 + 2608	open	119	3.8	MD	26
1125.8 + 2608	compact	134	1.2	ED	27
1126.4 + 2123	medium compact	226	3.3	D	56
1127.0 + 2226	medium compact	70	1.1	VD	54
1127.1 + 2512	medium compact	183	3.5	D	25
1127.2 + 2406	medium compact	265	2.5	VD	28
1127.7 + 2052	compact	280	2.5	D	40
1128.0 + 2015	medium compact	568	4.1	D	6
1128.6 + 2244	medium compact	97	1.9	VD	53
1128.6 + 2402	open	154	4.6	MD	24
1128.7 + 2540	medium compact	106	2.5	D	21
1128.8 + 2158	medium compact	246	3.9	D	38
1129.4 + 2204	compact	56	0.4	ED	39
1130.0 + 2453	medium compact	105	3.4	D	23
1131.5 + 2257	medium compact	353	7.0	D	36
1131.8 + 2555	open	222	5.5	MD	20
1131.9 + 2509	medium compact	123	1.4	ED	22

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1132.9 + 2120	compact	157	1.5	VD	37
1132.9 + 2400	medium compact	141	3.4	D	18
1133.5 + 2354	compact	52	1.0	ED	19
1133.7 + 2037	compact	110	1.3	VD	8
1133.8 + 2433	open	188	3.3	VD	17
1134.4 + 2504	medium compact	82	1.1	ED	16
1142.1 + 2126	medium compact	1895	23.8	Near	7

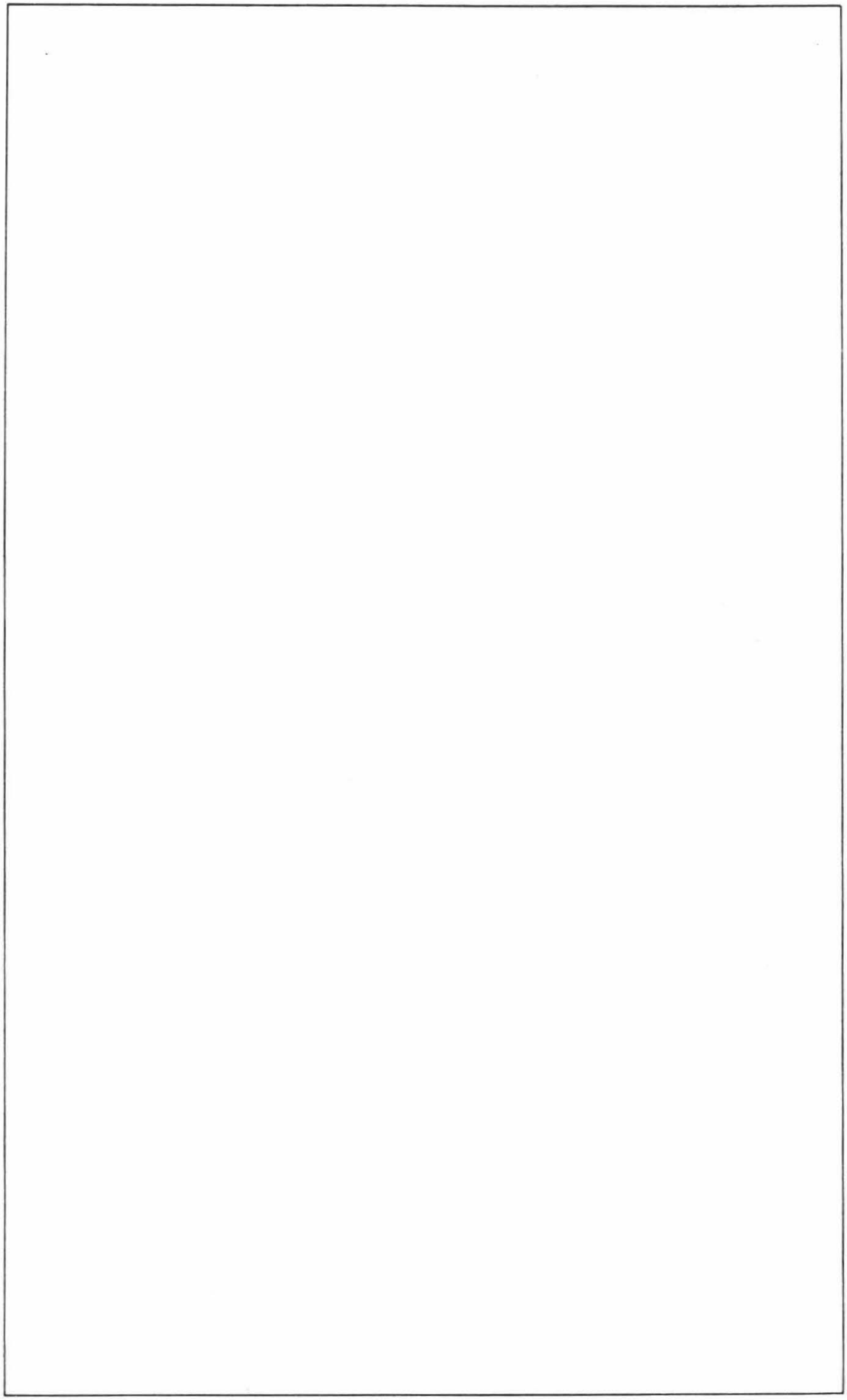
Average number of galaxies per cluster = 237.9

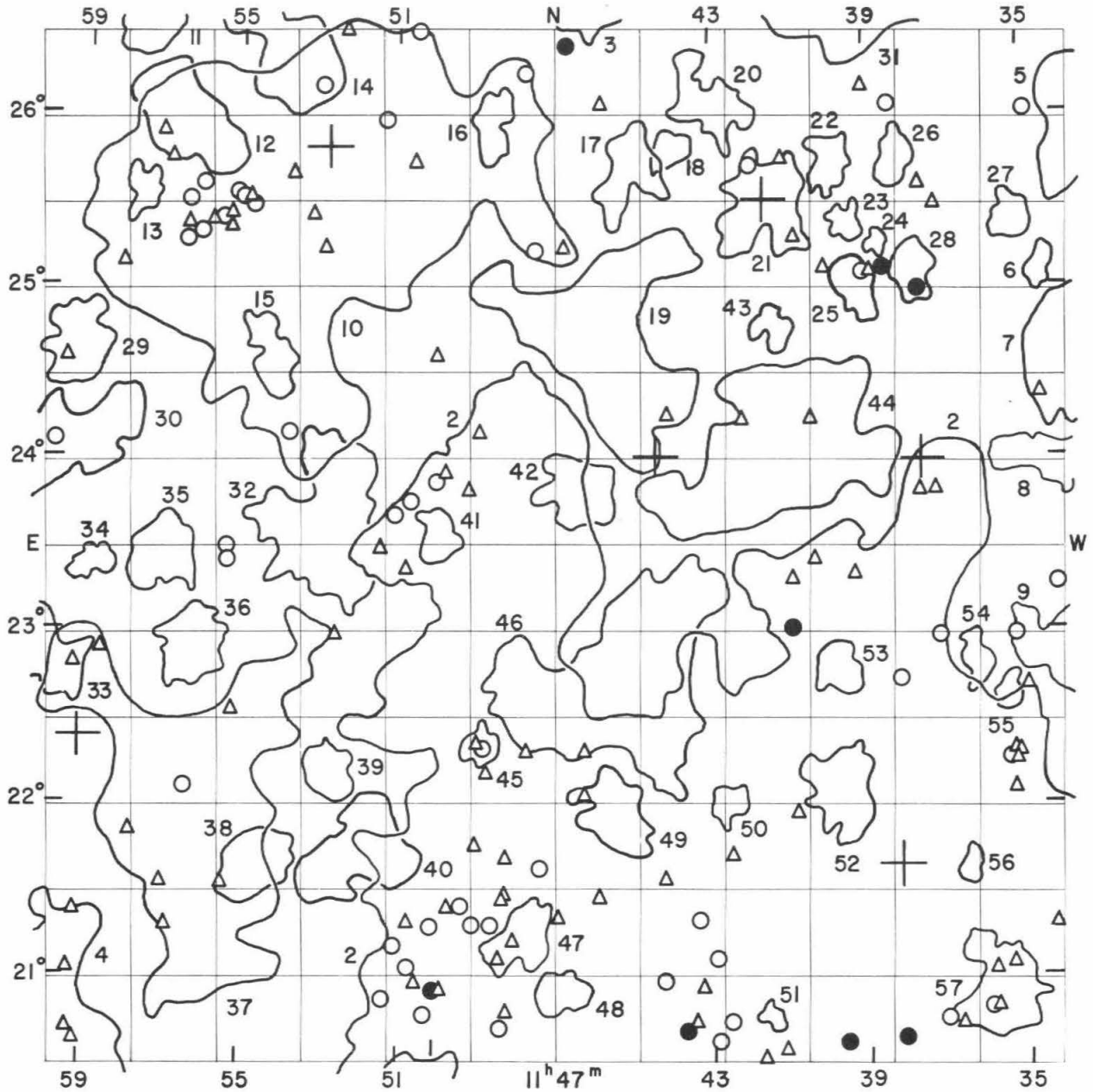
GALAXIES

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
11 08.4	+ 26 12		15.7		compact
11 08.8	+ 23 15		15.4		
11 09.8	+ 23 33		15.0		double system
11 10.0	+ 23 35		15.7		
11 10.0	+ 25 46		15.2		extremely compact
11 10.2	+ 23 32		15.7		
11 10.2	+ 25 53		15.6		very compact
11 10.6	+ 26 08		15.4		
11 10.8	+ 23 35		15.7		
11 11.1	+ 21 48		15.6		diffuse irregular system
11 11.4	+ 20 40	3588	15.3		double nebula, tidal effect
11 12.5	+ 26 10		15.5		compact
11 12.8	+ 23 37		15.7		
11 13.0	+ 22 21		15.7		diffuse
11 13.2	+ 26 15		15.6		
11 14.5	+ 26 07		15.6		
11 14.7	+ 22 37		15.7		
11 14.7	+ 25 43		15.6		compact
11 14.8	+ 26 02		15.7		compact
11 15.2	+ 22 46		15.6		
11 15.4	+ 23 40	3615	14.0		
11 15.6	+ 23 42		15.6		compact
11 15.7	+ 22 43		15.5		
11 15.8	+ 25 35		15.5		
11 15.9	+ 23 45	3618	14.4		
11 15.9	+ 25 09		15.7		
11 16.0	+ 21 51		15.6		
11 16.1	+ 23 36		15.5		
11 16.3	+ 23 10		14.7		
11 16.6	+ 21 05		14.5		
11 16.6	+ 23 10		15.4		
11 16.8	+ 25 15		15.3		very compact
11 17.0	+ 25 13		15.6		
11 18.3	+ 21 37		15.2		
11 18.3	+ 24 35		15.4		
11 18.4	+ 21 38		15.7		
11 18.8	+ 24 41		15.7		
11 19.1	+ 22 46		15.6		
11 19.4	+ 26 12		15.7		diffuse
11 19.5	+ 24 35	2759*	15.5		
11 19.5	+ 24 36		15.6		
11 19.8	+ 24 34	3651	14.6		double nebula
11 19.9	+ 20 59	3650	14.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 19.9 + 24 32	3653	15.0		
11 20.6 + 24 50		15.7		
11 22.0 + 23 53		15.4		
11 22.0 + 24 16		15.7		
11 22.1 + 24 13	3670	14.6		
11 22.8 + 22 59		15.6		
11 22.9 + 23 05		14.6		
11 23.1 + 24 24		15.2		
11 24.2 + 21 25		15.7		
11 24.2 + 22 53		15.6		
11 25.0 + 24 02		15.7		
11 25.4 + 25 33		15.6		
11 25.5 + 22 16		15.0		
11 25.6 + 25 56	3689	12.9		m_H = 12.8 S
11 25.8 + 21 17		15.0		
11 25.9 + 21 23		15.6		
11 25.9 + 23 40		14.4		
11 26.1 + 21 04	3697	14.1		
11 26.1 + 23 13		15.5		compact
11 26.2 + 21 00		15.3		
11 26.2 + 21 01		15.3		
11 26.2 + 22 21		15.1		
11 26.4 + 21 52		15.4		compact
11 26.5 + 20 51	700*	15.0		quadruple nebula
11 26.8 + 24 21	3701	14.1		
11 27.0 + 22 24		14.9		
11 27.2 + 25 13		14.5		very compact
11 27.5 + 24 26		15.2		
11 27.8 + 26 05		15.4		
11 28.2 + 20 43		15.7		
11 28.2 + 20 45	701*	14.7		SBb with jet
11 28.3 + 20 30		15.4		
11 28.3 + 25 29		15.6		extremely compact
11 28.4 + 21 34		15.5		
11 28.4 + 23 02	3710	14.5		
11 28.4 + 25 27		15.3		
11 29.0 + 26 23		15.7		compact
11 29.1 + 20 40		15.2		
11 29.4 + 25 55		15.3		compact
11 29.9 + 20 43		14.9		
11 30.1 + 25 18		15.2		
11 30.4 + 24 58		15.7		double nebula, collision
11 30.6 + 24 25		15.7		
11 30.6 + 24 43	3728	14.7		
11 30.6 + 25 30		15.7		compact
11 30.8 + 22 44		15.3		
11 30.8 + 25 24		15.3		
11 31.0 + 21 39	707*	14.4		
11 31.0 + 22 08		15.7		double system
11 31.0 + 23 41		15.1		
11 31.0 + 24 57		15.6		
11 31.2 + 23 55		15.0		double system
11 31.3 + 22 35		15.5		
11 31.8 + 20 38		15.5		very compact
11 31.8 + 26 08	710*	15.7		
11 31.9 + 22 47		15.6		
11 32.1 + 20 45		15.6		
11 32.2 + 25 47		15.1		
11 32.4 + 20 57		15.7		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
11	32.6	+20	35		15.7		
11	32.8	+20	47		15.6		
11	33.0	+25	20	3739	15.3		
11	33.2	+22	00	3743	15.6		compact
11	33.2	+23	16	3744	15.4		
11	33.6	+20	48		15.5		very compact
11	33.6	+22	42		14.8		
11	33.8	+21	52	3758	14.8		





FIELD No. 127

11^h47^m $+23^\circ30'$

Survey Plate No. 103

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
16016	11 37 33.1	+ 23 59 07	6.82
16030	11 38 11.2	+ 21 37 50	5.43
16105	11 41 37.1	+ 25 29 45	6.19
16156	11 44 25.6	+ 23 59 53	6.85
16302	11 52 50.2	+ 25 48 03	7.04
16442	11 59 10.7	+ 22 22 22	6.58

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1131.5 + 2257	medium compact	353	7.0	D	9
1131.8 + 2555	open	222	5.5	MD	5
1132.9 + 2400	medium compact	141	3.4	D	8
1133.8 + 2433	open	188	3.3	VD	7
1134.4 + 2504	medium compact	82	1.1	ED	6
1135.2 + 2524	medium compact	79	1.4	VD	27
1135.5 + 2237	compact	101	1.1	VD	55
1135.7 + 2055	compact	178	2.5	D	57
1136.2 + 2248	medium compact	71	1.3	VD	54
1136.5 + 2138	compact	85	0.8	ED	56
1137.7 + 2505	medium compact	116	1.6	VD	28
1138.2 + 2544	medium compact	88	1.5	ED	26
1138.7 + 2515	compact	70	0.6	ED	24
1139.2 + 2500	medium compact	127	1.6	VD	25
1139.5 + 2522	compact	91	1.1	VD	23
1139.7 + 2205	compact	147	2.3	D	52
1139.8 + 2246	medium compact	78	1.5	VD	53
1139.9 + 2542	compact	140	1.6	VD	22
1140.0 + 2715	open	247	8.2	Near	31
1141.1 + 2403	medium compact	410	5.8	VD	44
1141.4 + 2445	open	125	1.2	ED	43
1141.5 + 2045	compact	70	0.7	ED	51
1141.6 + 2529	open	147	2.6	D	21
1142.1 + 2126	medium compact	1895	23.8	Near	2
1142.6 + 2200	medium compact	105	1.2	ED	50
1142.9 + 2603	medium compact	132	2.2	D	20
1144.0 + 2547	medium compact	71	1.2	VD	18
1145.0 + 2540	compact	201	2.3	D	17
1145.3 + 2239	medium compact	524	6.2	D	46
1145.5 + 2157	compact	178	2.3	MD	49
1145.6 + 2438	open	232	5.5	MD	19
1146.4 + 2348	compact	180	2.2	VD	42
1146.5 + 2645	open	137	3.5	MD	3
1146.9 + 2055	medium compact	112	1.6	VD	48
1147.9 + 2114	medium compact	150	2.0	D	47
1148.6 + 2555	medium compact	143	1.6	VD	16
1148.9 + 2220	compact	155	1.2	VD	45
1150.0 + 2333	medium compact	174	1.4	ED	41
1150.4 + 2015	open	140	2.6	VD	1
1152.0 + 2142	medium compact	256	3.4	D	40
1152.8 + 2210	open	115	1.7	VD	39
1152.9 + 2336	compact	620	4.3	D	32
1153.0 + 2522	medium compact	330	12.5	Near	10
1154.2 + 2435	medium compact	113	1.8	VD	15
1154.3 + 2645	medium compact	434	4.7	MD	14
1154.6 + 2140	medium compact	116	2.2	VD	38
1156.2 + 2201	open	188	7.9	Near	37
1156.2 + 2255	medium compact	148	2.2	MD	36
1156.6 + 2558	compact	272	3.3	MD	12
1157.0 + 2326	compact	184	2.2	ED	35
1157.3 + 2635	open	221	2.5	VD	11
1157.6 + 2532	medium compact	135	1.4	VD	13
1158.9 + 2323	compact	172	1.3	ED	34
1159.3 + 2439	medium compact	146	2.3	MD	29
1159.7 + 2405	medium compact	336	3.4	D	30
1200.5 + 2253	open	168	3.0	VD	33

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1202.0 + 2028	open	555	9.7	Near	4

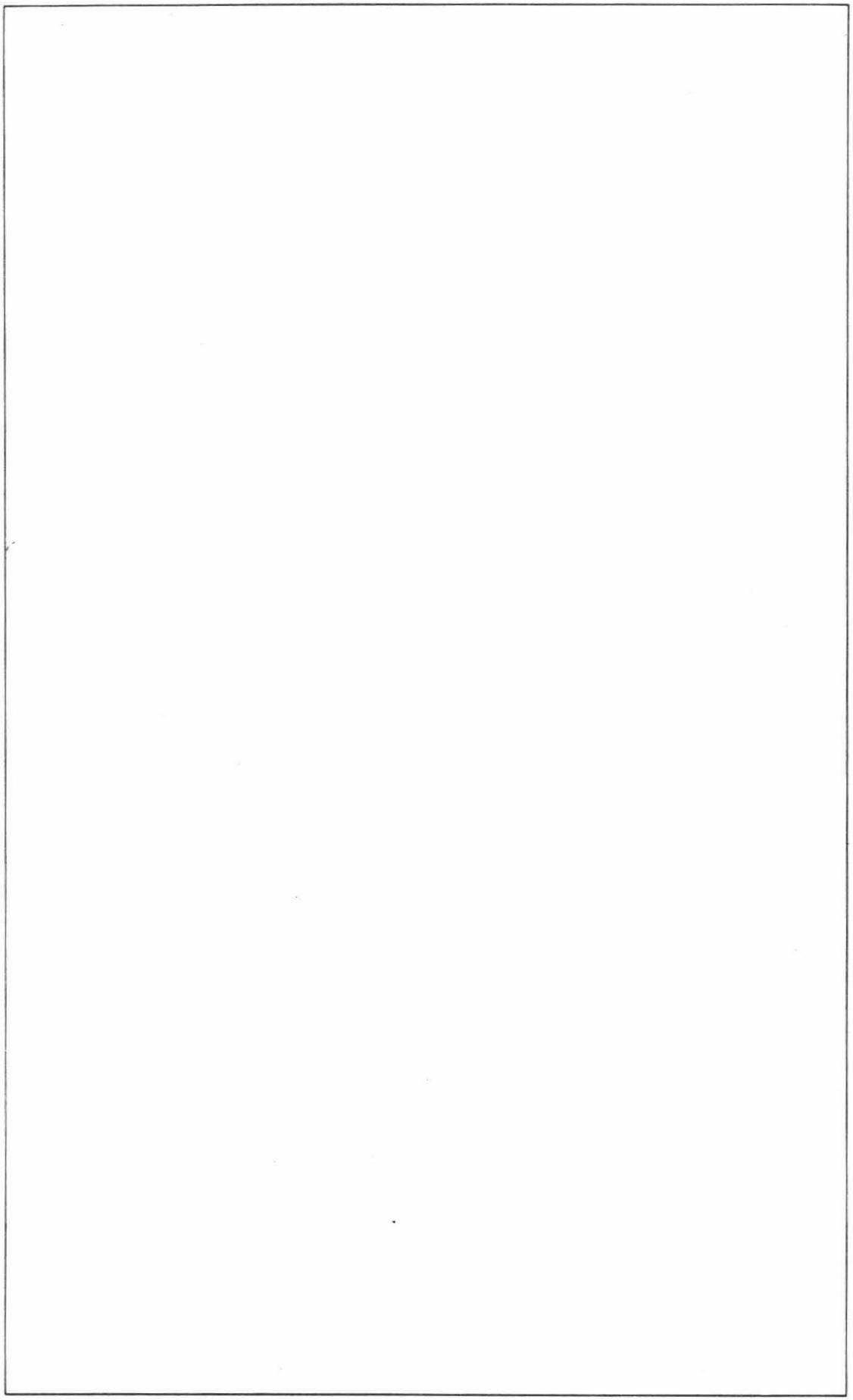
Average number of galaxies per cluster = 217.4

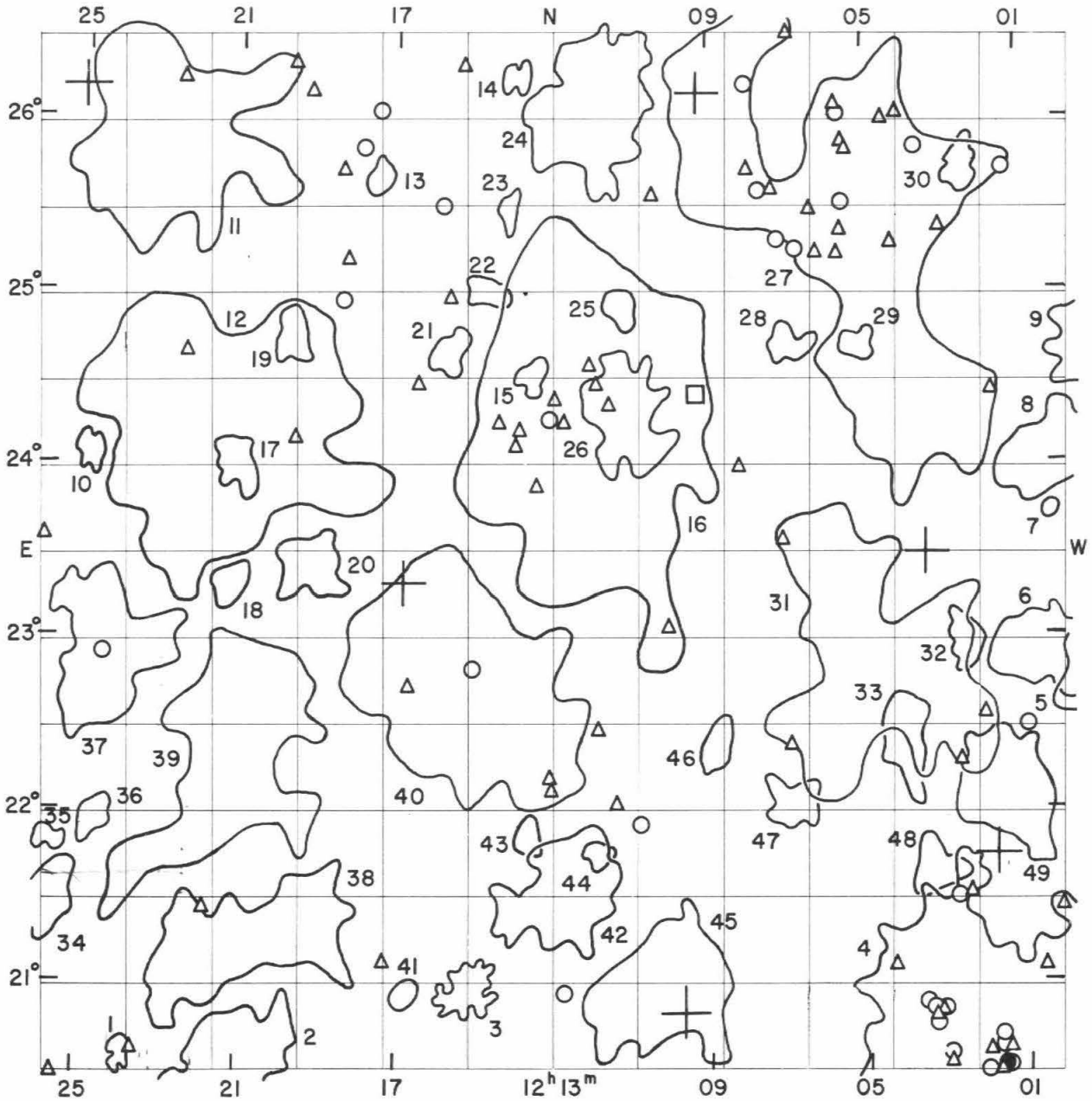
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 34.2	+ 23 16	3761	15.0		very compact
11 34.4	+ 21 17		15.5		
11 34.5	+ 24 23	3765	15.1		
11 34.8	+ 26 02		14.5		
11 35.0	+ 22 41		15.4		
11 35.1	+ 22 17		15.3		
11 35.2	+ 22 18		15.5		
11 35.2	+ 22 58	3772	14.4		
11 35.3	+ 22 15		15.2		
11 35.4	+ 21 04		15.7		
11 35.4	+ 22 05		15.3		
11 35.4	+ 22 16		14.6		double system
11 35.8	+ 20 49		15.5		
11 35.9	+ 21 01		15.2		
11 36.0	+ 20 49		14.9		
11 36.7	+ 20 43		15.6		
11 37.1	+ 20 45	3787	14.7		
11 37.2	+ 22 58		15.0		
11 37.2	+ 23 49		15.6		
11 37.2	+ 25 28		15.6		compact
11 37.6	+ 23 48		15.7		
11 37.6	+ 24 59	3798	13.9		
11 37.6	+ 25 35		15.4		compact
11 38.2	+ 20 38	3805	13.8		
11 38.2	+ 22 43	3808	14.1		double system, bridge
11 38.3	+ 26 04		14.8		
11 38.5	+ 25 07	3812	13.9		
11 38.9	+ 25 05	3814	15.6		
11 39.0	+ 26 10		15.6		double system
11 39.1	+ 25 05	3815	14.2		
11 39.3	+ 23 20		15.2		
11 39.6	+ 20 36	3821	13.8		
11 40.0	+ 25 07		15.2		
11 40.4	+ 23 25		15.5		
11 40.4	+ 24 13		15.4		
11 40.8	+ 21 56		15.5		
11 40.8	+ 25 18		15.4		
11 40.9	+ 23 00		14.0		
11 40.9	+ 23 18		15.3		
11 41.1	+ 20 34		15.3		
11 41.1	+ 25 44		15.5		
11 41.6	+ 20 30		15.1		double system
11 42.0	+ 25 43		15.0		
11 42.2	+ 24 13		15.6		compact
11 42.5	+ 20 44		14.5		
11 42.5	+ 21 42		15.6		
11 42.9	+ 20 37		14.6		
11 42.9	+ 21 06		15.0		very compact
11 43.3	+ 20 55		15.5		
11 43.4	+ 21 19		14.8		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 43.5 + 20 44	732*	15.1		double system
11 43.6 + 20 41	3884	14.0		
11 44.1 + 24 15		15.4		
11 44.2 + 20 58	3883	14.2		extremely diffuse spiral
11 44.2 + 21 34		15.1		compact
11 45.8 + 21 26		15.7		
11 45.8 + 26 02		15.3		quadruple system
11 46.2 + 22 17		15.7		
11 46.3 + 22 02		15.6		
11 46.7 + 26 24	3902	14.0		
11 46.8 + 25 13	3911	15.4		
11 46.9 + 21 20		15.5		
11 47.4 + 21 38	3910	14.4		
11 47.5 + 25 13	3920	14.1		
11 47.7 + 26 15		14.4		
11 47.8 + 22 18		15.6		
11 48.0 + 21 12		15.5		
11 48.2 + 21 27		15.3		
11 48.2 + 21 41		15.7		
11 48.3 + 20 47		15.4		
11 48.3 + 21 25		15.4		
11 48.4 + 20 41		14.6		
11 48.4 + 21 05	742*	15.1		
11 48.6 + 21 17		15.0		
11 48.7 + 22 11	3925	15.3		
11 48.9 + 22 19	3926	14.7		double system in halo
11 48.9 + 24 09	739*	15.1		
11 49.0 + 21 45		15.3		
11 49.0 + 22 20		15.7		
11 49.1 + 21 17	3929	14.5		
11 49.3 + 23 48		15.7		
11 49.4 + 21 24		14.7		
11 49.8 + 21 24		15.1		
11 49.8 + 23 54		15.6		very compact
11 49.9 + 20 55	2958*	15.5		
11 50.0 + 23 53		14.8		
11 50.0 + 24 35		15.4		
11 50.1 + 20 55	3937	14.0		
11 50.1 + 21 17	3940	14.3		
11 50.3 + 20 46	3943	14.7		
11 50.5 + 26 30	3944	14.3		
11 50.6 + 20 57		15.3		
11 50.6 + 25 43		15.1		
11 50.7 + 23 45		15.0		
11 50.8 + 21 02	3947	14.2		
11 50.8 + 21 19	3946	15.5		
11 50.8 + 23 21		15.5		
11 51.1 + 21 10	3954	14.4		compact
11 51.1 + 23 40	3951	14.5		
11 51.4 + 20 52		14.9		
11 51.4 + 25 58		14.9		
11 51.5 + 23 29	744*	15.7		
11 52.4 + 26 29		15.6		very diffuse spiral
11 52.6 + 22 59		15.5		
11 52.9 + 25 13		15.7		very compact
11 53.0 + 26 10	746*	14.5		
11 53.3 + 25 25		15.7		
11 53.8 + 24 09	3983	14.8		
11 53.8 + 25 39		15.7		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
11	54.7	+ 25	29	3987	14.4		
11	54.8	+ 25	30	3989	15.7		
11	55.0	+ 25	31	3993	14.8		
11	55.2	+ 22	33		15.5		compact
11	55.2	+ 25	33	3997	14.3		
11	55.4	+ 23	24	4003=4007	14.8		
11	55.4	+ 23	29	4002	14.7		
11	55.4	+ 25	21	3999	15.7		
11	55.4	+ 25	25	4000	15.2		
11	55.5	+ 21	32		15.3		
11	55.6	+ 25	24	4005	14.1		
11	55.8	+ 25	23	4011	15.7		
11	56.1	+ 25	19	4015	14.2		double nebula
11	56.1	+ 25	36	4018	14.7		
11	56.4	+ 25	22	4021	15.3		compact
11	56.4	+ 25	30	4022	14.4		
11	56.5	+ 22	06		15.0		
11	56.5	+ 25	16	4023	14.6		
11	56.8	+ 21	18		15.7		extremely compact
11	56.9	+ 25	45		15.5		
11	57.0	+ 21	32		15.1		
11	57.2	+ 25	53		15.7		
11	57.8	+ 21	51		15.6		
11	58.1	+ 25	08		15.3		
11	58.6	+ 22	54		15.7		
11	59.1	+ 20	37		15.2		
11	59.2	+ 21	22		15.7		
11	59.3	+ 20	42		15.6		
11	59.3	+ 21	02		15.5		
11	59.3	+ 22	49		15.5		
11	59.6	+ 24	35		15.7		
11	59.9	+ 24	06		15.0		





FIELD No. 128

12^h13^m $+23^\circ30'$

Survey Plate No. 135

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
16489	12 01 43.1	+ 21 44 15	5.77
16532	12 03 27.7	+ 23 28 58	7.36
16659	12 09 19.1	+ 26 08 55	5.81
16667	12 09 36.8	+ 20 49 13	5.67
16799	12 16 47.7	+ 23 18 44	6.15
16980	12 25 08.4	+ 26 11 19	6.57

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1156.2 + 2201	open	188	7.9	Near	5
1159.3 + 2439	medium compact	146	2.3	MD	9
1159.7 + 2405	medium compact	336	3.4	D	8
1200.4 + 2342	compact	55	0.4	ED	7
1200.5 + 2253	open	168	3.0	VD	6
1201.5 + 2205	medium compact	147	3.4	D	49
1202.0 + 2028	open	555	9.7	Near	4
1202.5 + 2256	medium compact	95	1.4	VD	32
1202.5 + 2541	medium compact	93	1.3	ED	30
1203.2 + 2137	medium compact	94	1.5	VD	48
1204.0 + 2223	open	97	2.0	VD	33
1204.7 + 2246	open	178	6.7	Near	31
1205.2 + 2440	compact	94	1.0	ED	29
1205.4 + 2515	medium compact	297	9.4	Near	27
1206.9 + 2200	medium compact	117	1.5	VD	47
1207.0 + 2439	medium compact	57	1.2	VD	28
1208.9 + 2221	medium compact	81	1.3	ED	46
1210.2 + 2055	medium compact	101	4.3	D	45
1211.0 + 2415	medium compact	163	3.2	D	26
1211.3 + 2452	compact	95	1.1	ED	25
1211.9 + 2144	compact	61	0.8	ED	44
1212.0 + 2409	open	139	9.5	Near	16
1212.0 + 2601	medium compact	197	4.3	D	24
1212.8 + 2130	open	99	3.5	D	42
1213.6 + 2149	medium compact	58	1.1	ED	43
1213.6 + 2429	medium compact	91	1.0	ED	15
1213.9 + 2612	medium compact	70	0.8	ED	14
1214.1 + 2525	compact	60	0.9	ED	23
1214.6 + 2459	medium compact	90	1.2	ED	22
1215.0 + 2240	medium compact	239	7.1	MD	40
1215.2 + 2056	compact	219	1.6	VD	3
1215.6 + 2437	compact	94	1.3	ED	21
1216.8 + 2056	compact	62	0.8	ED	41
1217.5 + 2538	compact	104	0.9	ED	13
1219.1 + 2322	medium compact	183	2.0	ED	20
1219.6 + 2444	medium compact	75	1.4	ED	19
1220.6 + 2115	medium compact	243	4.7	D	38
1220.9 + 2028	open	174	3.8	MD	2
1221.0 + 2217	open	142	5.7	MD	39
1221.1 + 2359	medium compact	95	1.5	VD	17
1221.2 + 2317	medium compact	89	1.3	ED	18
1221.4 + 2411	open	203	8.6	Near	12
1222.9 + 2551	medium compact	167	6.2	MD	11
1223.8 + 2035	medium compact	77	0.8	ED	1
1224.2 + 2256	open	153	4.0	D	37
1224.6 + 2157	medium compact	67	1.1	ED	36
1224.8 + 2402	medium compact	90	1.1	ED	10
1225.8 + 2149	compact	58	0.8	ED	35
1226.8 + 2113	open	200	3.1	VD	34

Average number of galaxies per cluster = 137.9

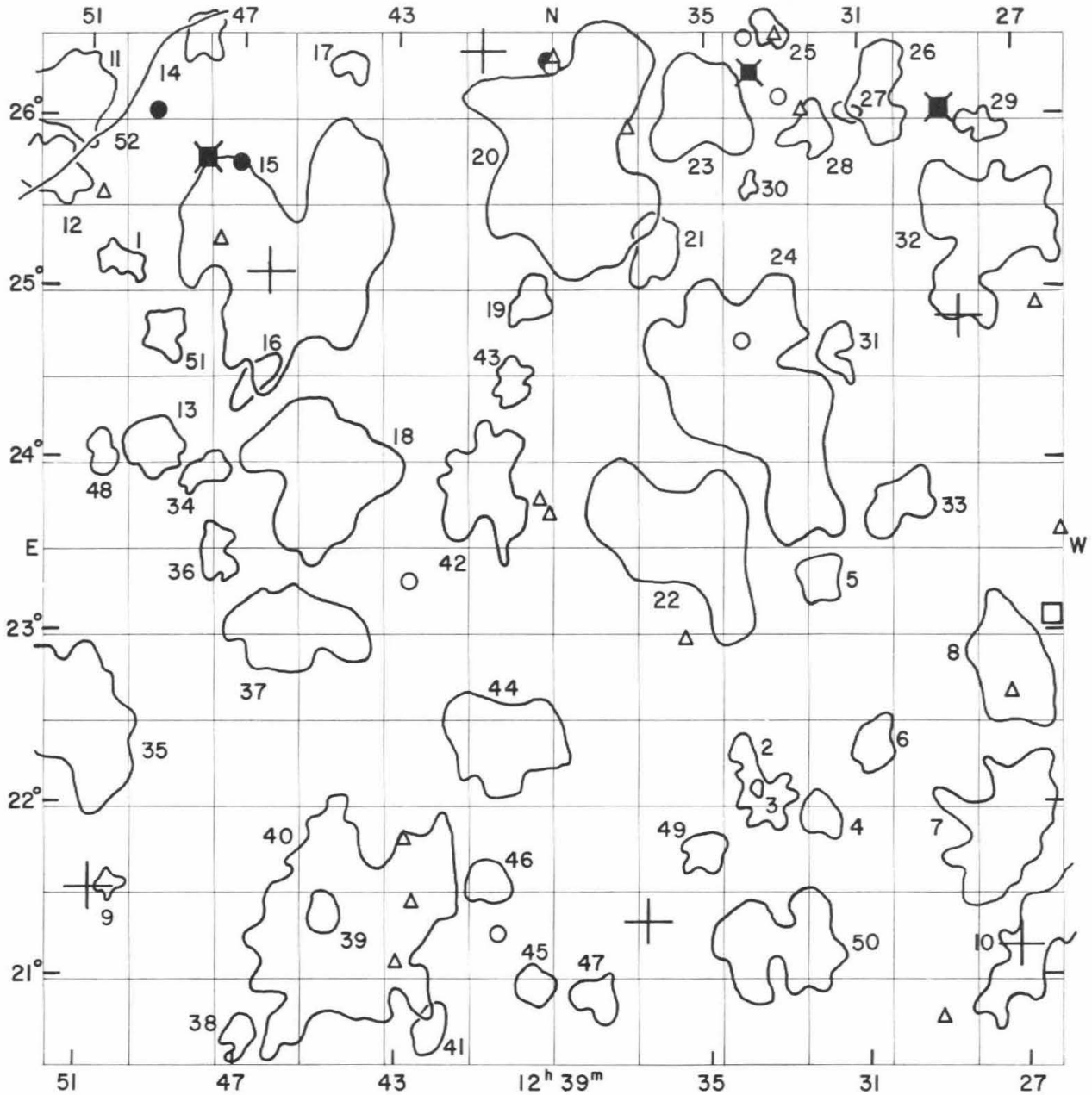
GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 00.0 +21 26		15.5		very compact
12 00.5 +21 05		15.7		
12 00.9 +22 30		14.6		
12 01.3 +25 43		14.9		
12 01.5 +20 30	4061	14.4		compact
12 01.5 +20 37	4060	15.6		
12 01.6 +20 30	4065	14.0		very compact
12 01.6 +20 38	4066	14.4		
12 01.6 +20 42	4070	14.3		
12 01.7 +20 29	4072	15.6		
12 01.7 +24 25		15.7		system with jet
12 02.0 +20 28	4076	14.3		
12 02.0 +20 36	4074	15.4		
12 02.0 +22 34		15.7		
12 02.4 +21 31		15.3		
12 02.6 +22 17		15.2		compact
12 02.7 +21 30	4084	14.9		
12 02.9 +20 31	4086	15.1		
12 02.9 +20 35	4090	15.0		
12 03.0 +20 50	4089	14.9		
12 03.0 +25 23		15.4		
12 03.1 +20 50	4091	15.2		
12 03.3 +20 46	4092	14.4		
12 03.3 +20 49	4093	15.3		compact
12 03.4 +20 51	4095	14.6		very compact
12 03.5 +20 53	4098	14.5		
12 03.6 +25 50	4101	14.7		
12 04.0 +26 02		15.7		double system, bridge
12 04.2 +25 17		15.7		diffuse double system
12 04.3 +21 05		15.6		
12 04.4 +26 00		15.7		triple system
12 05.4 +25 50		15.2		
12 05.5 +25 21		15.6		
12 05.5 +25 31		14.4		
12 05.5 +25 53		15.1		compact
12 05.6 +25 14		15.1		
12 05.6 +26 02	762*	14.8		
12 05.7 +26 06	763*	15.3		
12 06.1 +25 14		15.2		
12 06.3 +25 28		15.1		
12 06.7 +25 15		15.0		
12 06.9 +22 23		15.7		double system, connected
12 06.9 +26 30		15.3		very diffuse spiral
12 07.1 +23 34		15.7		
12 07.2 +25 19		14.6		
12 07.3 +25 36		15.7		
12 07.6 +25 35		14.5		
12 08.0 +25 43		15.1		
12 08.0 +26 13		15.0		
12 08.2 +24 00		15.7		
12 09.3 +24 24	4162	12.6	+2546	$m_H = 12.6$
12 10.0 +23 04		15.6		
12 10.4 +25 34		15.6		
12 10.8 +21 55		14.6		
12 11.3 +22 02		15.7		
12 11.5 +24 20		15.5		very compact

Position α 1950 h m	δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
12 11.8	+ 22 28		15.6		
12 11.9	+ 24 28		15.7		diffuse spiral
12 12.0	+ 24 35		15.6		
12 12.7	+ 20 56	4204	14.3		
12 12.7	+ 24 14	3067*	15.5		
12 12.9	+ 24 22		15.6		
12 13.0	+ 22 06		15.3		
12 13.1	+ 22 11		15.1		
12 13.1	+ 24 15	4213	14.3		
12 13.4	+ 23 53	3075*	15.1		
12 13.8	+ 24 12	3084*	15.7		
12 13.9	+ 24 07	3089*	15.7		
12 14.3	+ 24 14	3095*	15.6		
12 15.0	+ 22 50		14.5		
12 15.3	+ 26 18	3112*	15.3		
12 15.6	+ 24 58	3119*	15.4		
12 15.8	+ 25 30	3122*	14.7		
12 16.4	+ 24 28	3141*	15.7		
12 16.7	+ 22 43		15.5		
12 17.3	+ 21 08		15.7		
12 17.4	+ 26 03	780*	14.5		
12 17.9	+ 25 51	3171*	14.8		
12 18.2	+ 25 12	3184*	15.6		
12 18.4	+ 24 57	3186*	15.0		
12 18.4	+ 25 43	3185*+3189*	15.7		double system
12 19.2	+ 26 10	3203*	15.7		
12 19.6	+ 24 09	3213*	15.7		
12 19.6	+ 26 20	3215*	15.7		
12 21.8	+ 21 26		15.6		
12 22.5	+ 24 40	3296*	15.6		
12 22.5	+ 26 14	3300*	15.3		
12 23.6	+ 20 37		15.7		
12 24.5	+ 22 55	791*	14.2		
12 25.6	+ 20 27		15.5		
12 26.0	+ 23 35	795*	15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4162	-	-	-	-	-	Sc	-	-



FIELD No. 129

$12^h39^m \quad +23^\circ30'$

Survey Plate No. 1435

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
17026	12 27 12.6	+ 21 10 22	5.72
17056	12 28 30.8	+ 24 50 36	5.39
17225	12 36 38.1	+ 21 20 14	5.51
17303	12 40 50.6	+ 26 24 01	6.71
17400	12 46 20.9	+ 25 06 50	6.39
17493	12 50 50.1	+ 21 30 59	5.10

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1226.8 + 2113	open	200	3.1	VD	10
1227.2 + 2248	open	188	3.2	D	8
1227.6 + 2151	medium compact	203	3.6	D	7
1227.6 + 2520	medium compact	178	4.4	MD	32
1227.8 + 2557	open	88	1.1	VD	29
1230.1 + 2345	medium compact	74	1.9	VD	33
1230.5 + 2609	open	98	2.3	VD	26
1230.9 + 2221	medium compact	127	1.5	ED	6
1231.3 + 2601	compact	45	0.6	ED	27
1231.6 + 2440	compact	74	1.3	VD	31
1232.1 + 2319	compact	174	1.4	ED	5
1232.2 + 2157	medium compact	116	1.3	ED	4
1232.2 + 2556	compact	107	1.6	VD	28
1233.2 + 2111	open	97	3.6	D	50
1233.3 + 2632	medium compact	68	1.0	ED	25
1233.6 + 2204	medium compact	130	2.0	D	2
1233.8 + 2206	compact	47	0.4	ED	3
1233.8 + 2423	open	169	6.1	MD	24
1233.9 + 2536	compact	56	0.5	ED	30
1235.0 + 2605	medium compact	139	3.1	VD	23
1235.2 + 2144	compact	85	1.3	ED	49
1235.6 + 2332	open	127	4.7	D	22
1236.4 + 2515	compact	159	2.0	ED	21
1237.9 + 2053	medium compact	112	1.4	ED	47
1238.5 + 2545	open	144	6.1	MD	20
1239.5 + 2058	medium compact	87	1.2	ED	45
1239.6 + 2456	medium compact	104	1.4	ED	19
1240.0 + 2427	compact	99	1.3	ED	43
1240.2 + 2223	medium compact	145	3.4	D	44
1240.7 + 2134	medium compact	109	1.4	ED	46
1240.8 + 2351	open	103	3.0	VD	42
1242.1 + 2043	medium compact	66	1.3	ED	41
1244.0 + 2119	open	221	6.3	MD	40
1244.3 + 2617	compact	66	0.9	ED	17
1244.8 + 2122	compact	83	1.2	ED	39
1244.9 + 2355	medium compact	203	4.5	D	18
1245.6 + 2300	open	103	3.2	VD	37
1245.9 + 2511	open	244	6.5	MD	15
1246.7 + 2429	medium compact	99	1.4	VD	16
1246.8 + 2039	medium compact	57	1.2	ED	38
1247.6 + 2328	open	90	1.4	ED	36
1247.9 + 2356	medium compact	92	1.3	ED	34
1248.0 + 2628	medium compact	75	1.3	ED	14
1249.0 + 2444	medium compact	117	1.4	ED	51
1249.2 + 2404	compact	181	1.9	ED	13
1250.1 + 2509	medium compact	90	1.2	ED	1
1250.3 + 2131	compact	48	0.7	ED	9
1250.6 + 2401	medium compact	79	1.1	ED	48
1251.9 + 2231	open	108	5.2	MD	35
1252.1 + 2609	medium compact	194	3.2	D	11
1252.2 + 2541	compact	197	2.3	VD	12
1257.1 + 2806	compact	2150	28.5	Near	52*

Average number of galaxies per cluster = 158.0

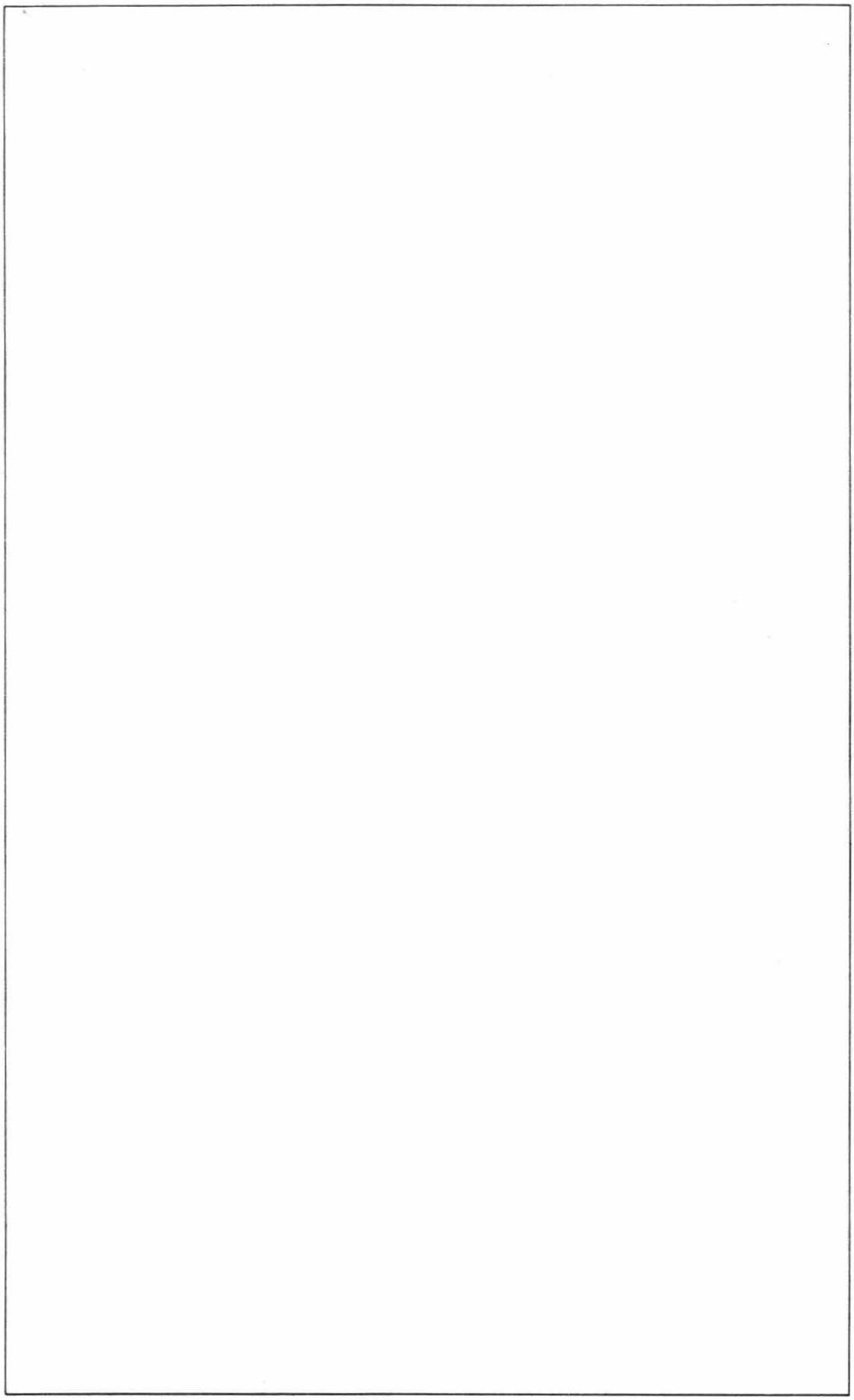
*Cluster No. 52 is the well known Coma I Cluster of galaxies.

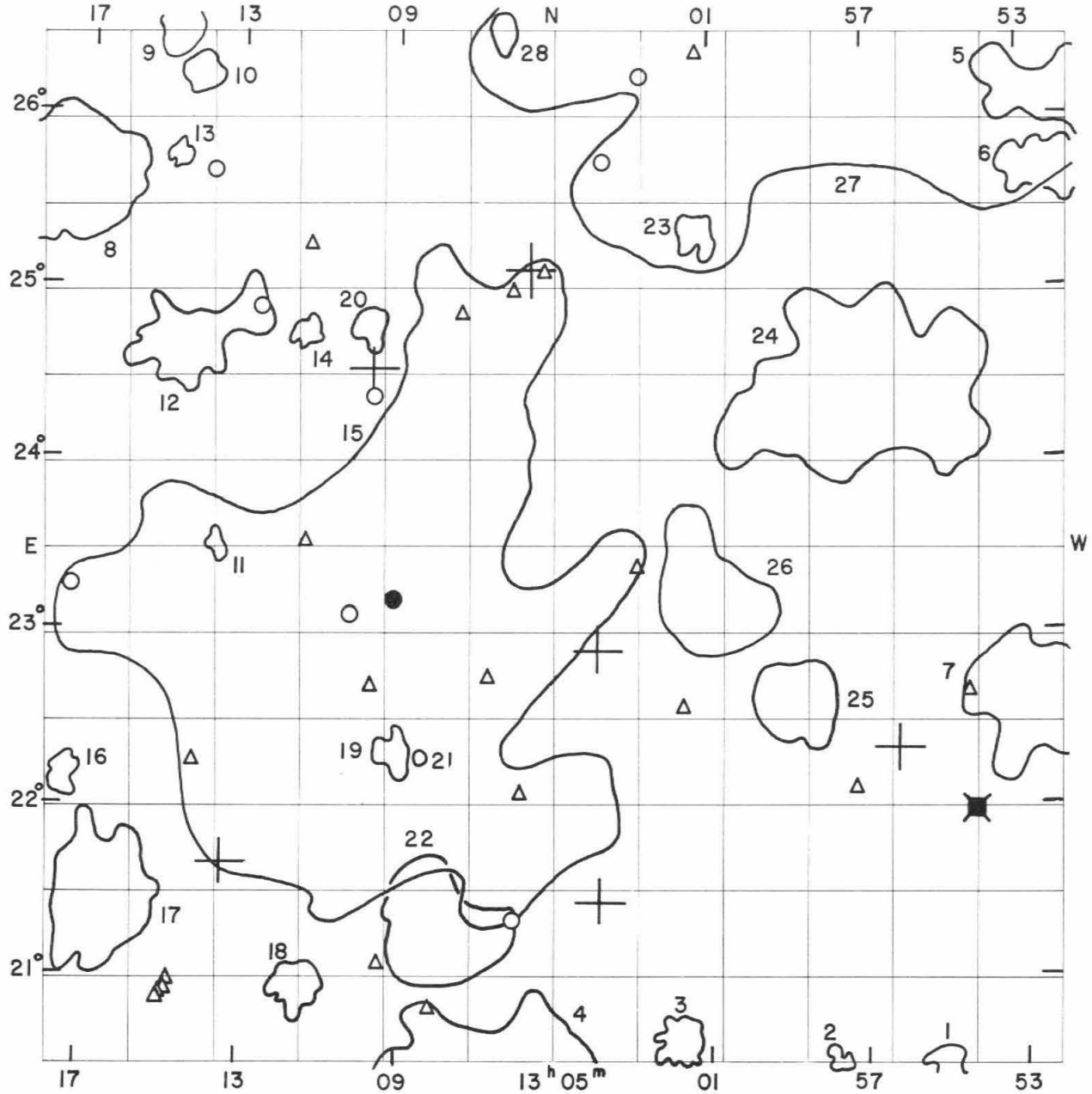
GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 26.0 +23 35	795*	15.3		
12 26.2 +23 06	4455	13.0		m_H = 13.0
12 26.5 +24 55	3403*	15.7		
12 27.3 +22 39		15.2		
12 28.9 +26 03	4494	10.7	+1318	m_H = 10.9 E
12 29.2 +20 46		15.6		diffuse
12 32.5 +26 03	3533*	15.7		compact
12 33.0 +26 08	4562	14.6		
12 33.2 +26 30	3546*	15.3		
12 33.8 +26 15	4565	10.3	+1199	m_H = 10.7 Sb
12 34.0 +26 28	3582*	14.3		very compact
12 34.1 +24 42	3581*	14.9		
12 35.6 +22 58		15.7		extremely diffuse spiral
12 37.0 +25 57	3626*	15.7		
12 39.0 +26 18	4614	14.2		
12 39.0 +26 21	4613	15.5		
12 39.1 +23 42	3662*	15.2		
12 39.1 +26 20	4615	13.8		
12 39.3 +23 47	3671*	15.5		
12 40.4 +21 16	3692*	14.8		
12 42.6 +21 27		15.3		
12 42.7 +23 19	813*+3734*	14.4		double system, bridge
12 42.8 +21 49	3736*	15.7		diffuse
12 43.0 +21 05	3740*	15.6		
12 47.1 +25 44	4712	13.5		m_H = 12.9 S
12 47.6 +25 17		15.4		
12 48.0 +25 46	4725	10.2	+1114	m_H = 10.8 SBb
12 49.3 +26 02	4747	13.2		m_H = 12.7 S
12 50.7 +25 32		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4494	-	-	-	-	10.9	E1	-	-
4565	10.0	Sb	-	-	-	Sb	10.30	Sb+
4712	-	-	-	-	-	-	13.46	Sc-
4725	9.8	Sab	-	-	10.0	Sb	10.07	Sb+
4747	-	-	-	-	-	-	12.90	Sc-





FIELD No. 130

13^h05^m $+23^o30'$

Survey Plate No. 1581

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
17605	12 56 13.7	+ 22 18 57	7.28
17767	13 03 55.0	+ 21 25 17	6.04
17769	13 03 56.6	+ 22 53 02	5.90
17799	13 05 38.7	+ 25 05 51	6.90
17877	13 09 43.9	+ 24 31 26	6.46
17956	13 13 32.5	+ 21 38 45	7.18

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1251.9 + 2231	open	108	5.2	MD	7
1252.1 + 2609	medium compact	194	3.2	D	5
1252.2 + 2541	compact	197	2.3	VD	6
1254.8 + 2024	compact	115	1.6	VD	1
1257.0 + 2425	open	315	6.6	MD	24
1257.1 + 2806	compact	2150	28.5	Near	27*
1257.8 + 2030	compact	49	0.6	ED	2
1258.6 + 2235	open	110	2.7	D	25
1301.0 + 2312	open	98	3.7	MD	26
1301.3 + 2516	medium compact	118	1.3	ED	23
1301.7 + 2037	medium compact	106	1.6	VD	3
1306.4 + 2629	compact	91	1.0	ED	28
1306.6 + 2018	medium compact	225	6.3	D	4
1307.9 + 2115	open	117	3.8	MD	22
1308.5 + 2215	compact	56	0.4	ED	21
1309.1 + 2216	compact	89	1.3	VD	19
1309.3 + 2255	open	259	16.0	Near	15
1309.8 + 2444	open	64	1.2	ED	20
1311.5 + 2055	medium compact	152	1.7	D	18
1311.5 + 2442	compact	62	0.9	ED	14
1313.6 + 2328	compact	57	0.6	ED	11
1314.2 + 2440	open	106	3.4	D	12
1314.3 + 2613	compact	103	1.1	ED	10
1314.8 + 2544	compact	91	0.7	ED	13
1314.8 + 2631	compact	174	1.8	VD	9
1316.4 + 2126	medium compact	83	3.9	D	17
1317.5 + 2207	open	102	1.1	VD	16
1317.9 + 2537	medium compact	241	4.7	D	8

Average number of galaxies per cluster = 201.1

*Cluster No. 27 is the well known Coma I Cluster of galaxies.

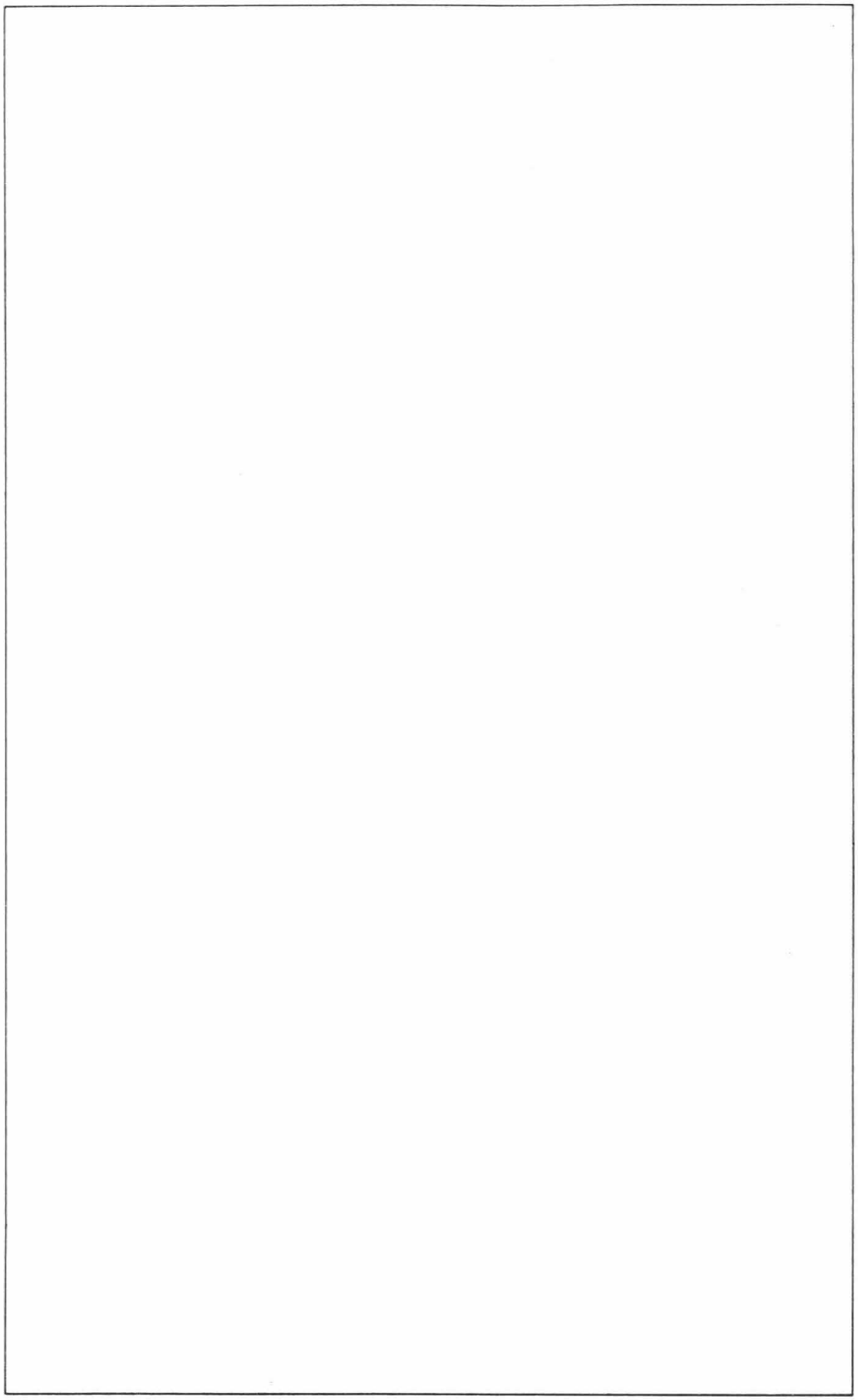
GALAXIES

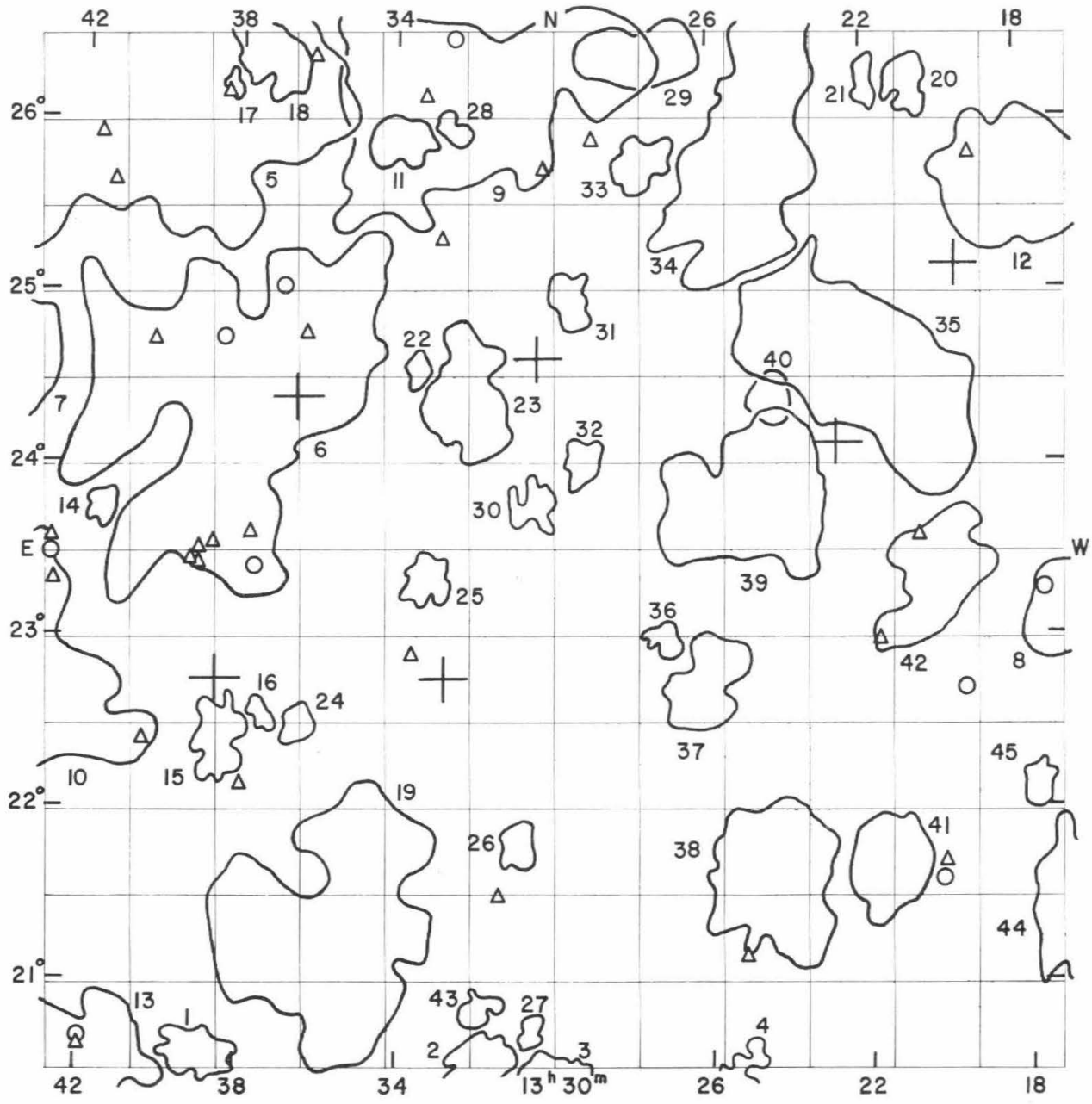
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 54.2	+ 21 57	4826	8.9	+ 382	m_H = 8.0 Sb
12 54.4	+ 22 39	3918*	15.6		
12 57.3	+ 22 05		15.4		
13 01.3	+ 26 21		15.7		
13 01.7	+ 22 34	4149*	15.5		
13 02.8	+ 26 13		15.0		
13 02.9	+ 23 22	846*	15.5		very compact
13 03.8	+ 25 43		14.9		
13 05.2	+ 25 05	4979=4198*	15.3		
13 05.9	+ 22 03		15.7		
13 06.0	+ 21 19	851*	14.9		
13 06.0	+ 24 58	4202*	15.2		
13 06.7	+ 22 44		15.6		
13 07.4	+ 24 51	854*	15.1		double system
13 08.2	+ 20 49	856*	15.2		
13 09.1	+ 23 12	5012	13.6		
13 09.5	+ 21 04		15.5		
13 09.7	+ 22 42		15.7		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	′				
13	09.7	+24	21	5016	14.3		
13	10.2	+23	06		14.8		disrupted spiral
13	11.3	+25	15		15.4		
13	11.4	+23	31		15.7		
13	12.6	+24	53	860*	14.8		
13	13.8	+25	40	4215*	15.0		
13	14.2	+22	15		15.5		
13	14 8	+20	55	867*	15.5		diffuse spiral
13	14.8	+20	58	866*	15.6		
13	14.9	+20	53	868*	15.4		
13	15.0	+20	52	870*	15.4		
13	17.5	+23	16	5092	14.7		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4826	9.3	Sb	-	-	9.2	Sb	9.27	Sb-





FIELD No. 131

13^h30^m $+23^o30'$

Survey Plate No. 125

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18090	13 19 37.0	+ 25 08 37	6.98
18147	13 22 43.6	+ 24 06 52	5.75
18313	13 30 26.0	+ 24 36 20	6.18
18365	13 32 49.7	+ 22 45 11	6.99
18453	13 36 35.8	+ 24 23 06	7.71
18499	13 38 40.4	+ 22 44 54	5.80

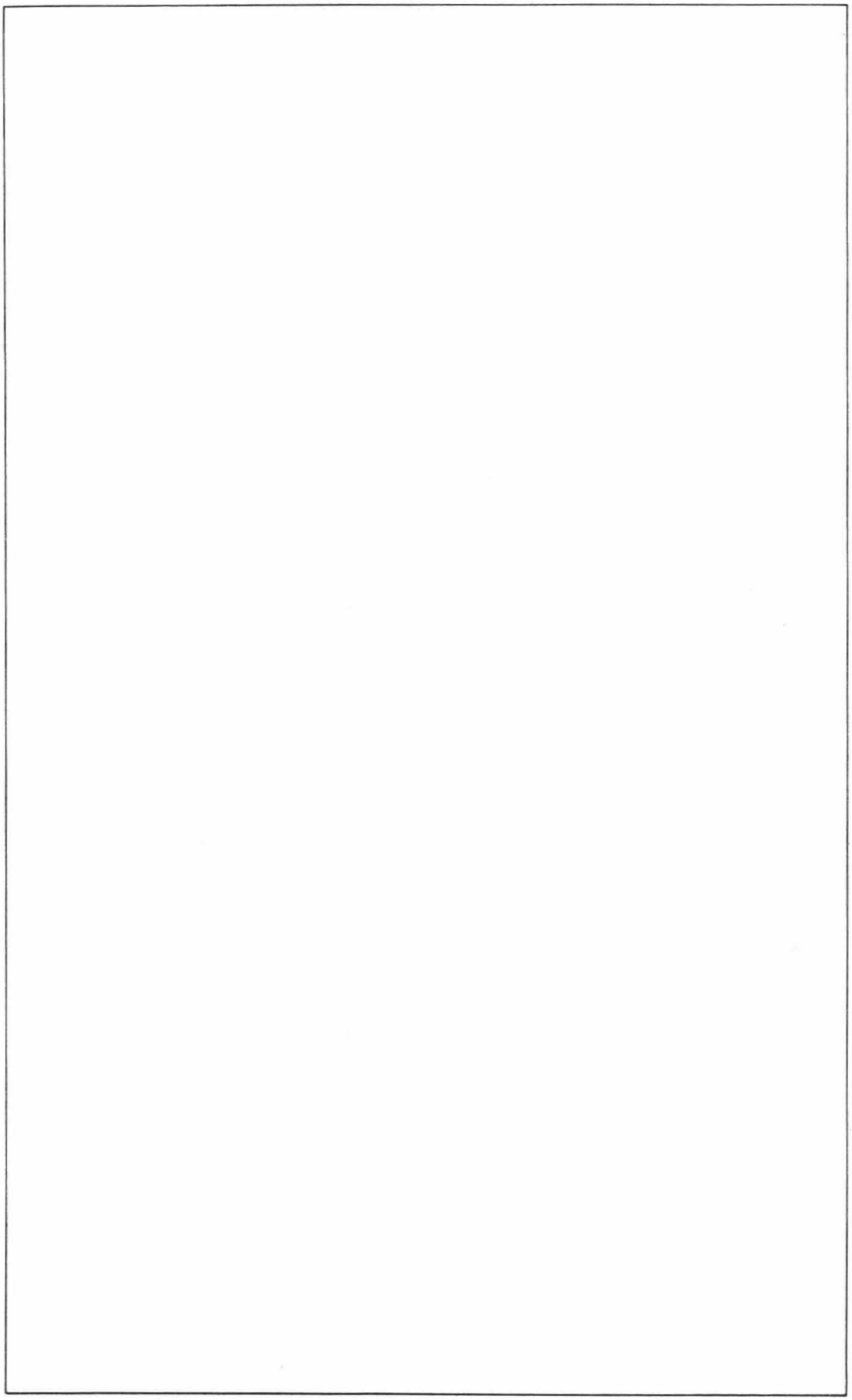
CLUSTERS OF GALAXIES

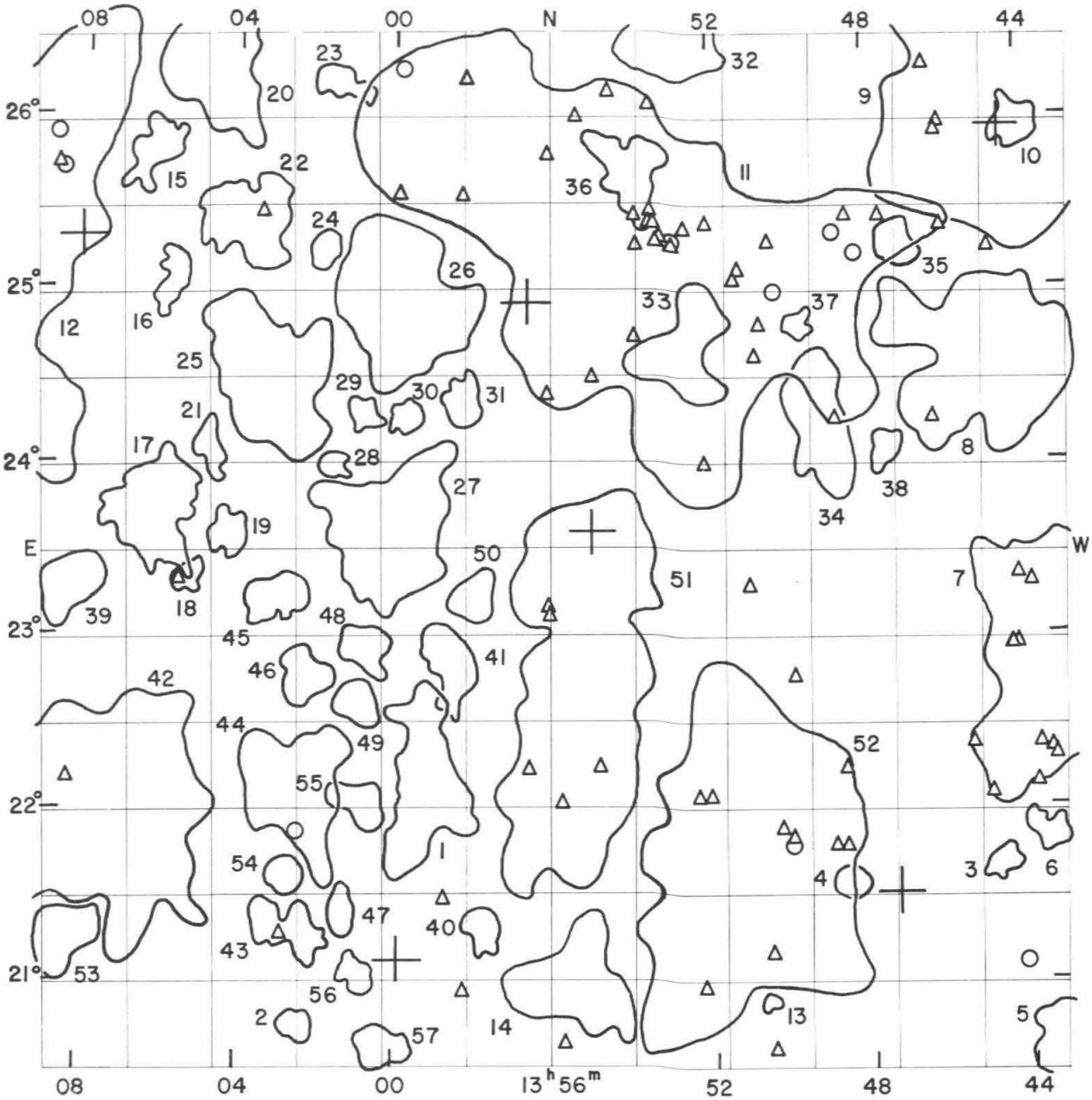
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1309.3 + 2255	open	259	16.0	Near	8
1316.4 + 2126	medium compact	83	3.9	D	44
1317.5 + 2207	open	102	1.1	VD	45
1317.9 + 2537	medium compact	241	4.7	D	12
1320.0 + 2320	compact	280	3.4	VD	42
1320.7 + 2611	medium compact	173	1.6	ED	20
1321.4 + 2140	compact	203	2.9	VD	41
1321.8 + 2612	medium compact	110	1.1	ED	21
1322.0 + 2433	medium compact	189	6.5	MD	35
1324.3 + 2136	medium compact	197	4.5	D	38
1324.4 + 2421	medium compact	110	1.4	VD	40
1324.6 + 2602	open	285	6.3	D	34
1325.0 + 2346	medium compact	270	4.9	D	39
1325.3 + 2028	medium compact	108	1.6	ED	4
1326.1 + 2243	medium compact	236	2.7	VD	37
1327.1 + 2259	compact	88	1.0	ED	36
1327.7 + 2544	open	103	1.7	VD	33
1327.8 + 2620	medium compact	149	2.8	VD	29
1329.2 + 2400	medium compact	137	1.4	ED	32
1329.5 + 2456	open	137	1.5	VD	31
1330.0 + 2027	medium compact	104	1.9	VD	3
1330.4 + 2345	open	103	1.5	VD	30
1330.5 + 2046	medium compact	92	0.9	ED	27
1330.8 + 2147	compact	128	1.3	ED	26
1331.8 + 2030	compact	166	2.1	VD	2
1331.8 + 2050	medium compact	104	1.1	ED	43
1332.0 + 2605	medium compact	345	7.7	MD	9
1332.1 + 2421	open	147	3.3	D	23
1332.5 + 2556	medium compact	87	1.0	ED	28
1333.1 + 2320	compact	151	1.6	ED	25
1333.4 + 2431	compact	103	1.0	ED	22
1333.9 + 2553	medium compact	94	1.7	VD	11
1335.6 + 2117	medium compact	430	7.1	D	19
1336.5 + 2230	compact	120	1.1	ED	24
1337.2 + 2621	open	96	2.2	D	18
1337.4 + 2233	compact	93	0.9	ED	16
1338.3 + 2611	compact	52	0.6	ED	17
1338.4 + 2420	medium compact	320	9.3	Near	6
1338.5 + 2224	medium compact	164	1.9	VD	15
1338.9 + 2034	open	66	1.9	VD	1
1341.6 + 2344	medium compact	102	1.0	VD	14
1341.6 + 2614	medium compact	694	12.5	Near	5
1342.1 + 2033	medium compact	123	3.6	MD	13
1343.3 + 2245	open	126	6.1	Near	10
1344.9 + 2436	medium compact	195	5.4	MD	7

Average number of galaxies per cluster = 170.3

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 17.5 +23 16	5092	14.7		
13 19.2 +25 47	4228*	15.4		
13 19.5 +22 42		14.9		double system
13 20.0 +21 41		15.1		
13 20.1 +21 35	885*	14.9		
13 20.6 +23 34		15.4		very diffuse spiral
13 21.7 +22 58		15.7		star 13 m superposed
13 25.1 +21 09		15.6		
13 29.0 +25 52		15.3		
13 30.3 +25 41	4287*	15.3		double nebula
13 31.4 +21 29		15.6		
13 32.6 +26 28		15.0		
13 32.9 +25 17		15.6		
13 33.3 +26 08		15.6		
13 33.7 +22 54		15.7		
13 36.2 +26 21		15.7		
13 36.4 +24 45		15.7		
13 37.0 +25 01		14.8		
13 37.7 +23 24	905*	15.0		compact
13 37.8 +23 35	906*	15.7		
13 38.0 +22 09		15.7		
13 38.5 +24 44	909*	14.9		
13 38.5 +26 09		15.2		double system
13 38.8 +23 32	910*	15.1		double system
13 39.1 +23 25	913*	15.6		
13 39.1 +23 30	911*+912*	15.6		double system, bridge
13 39.3 +23 26	914*	15.2		
13 40.3 +24 43	916*	15.4		compact
13 40.5 +22 24		15.2		
13 41.4 +25 38	4322*	15.5		compact
13 41.8 +25 55		15.4		
13 42.0 +20 38		15.2		compact
13 42.0 +20 40		15.0		
13 42.8 +23 19		15.3		
13 42.9 +23 28	933*	14.7		
13 42.9 +23 34		15.5		





FIELD No. 132

13^h56^m $+23^\circ30'$

Survey Plate No. 68

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
18623	13 44 24.0	+ 25 57 08	5.91
18683	13 47 20.9	+ 21 30 41	5.06
18863	13 54 57.7	+ 23 36 27	8.7
18907	13 56 35.8	+ 24 56 06	7.31
18963	14 00 00.0	+ 21 07 21	7.74
19127	14 08 07.1	+ 25 19 40	4.82

CLUSTERS OF GALAXIES

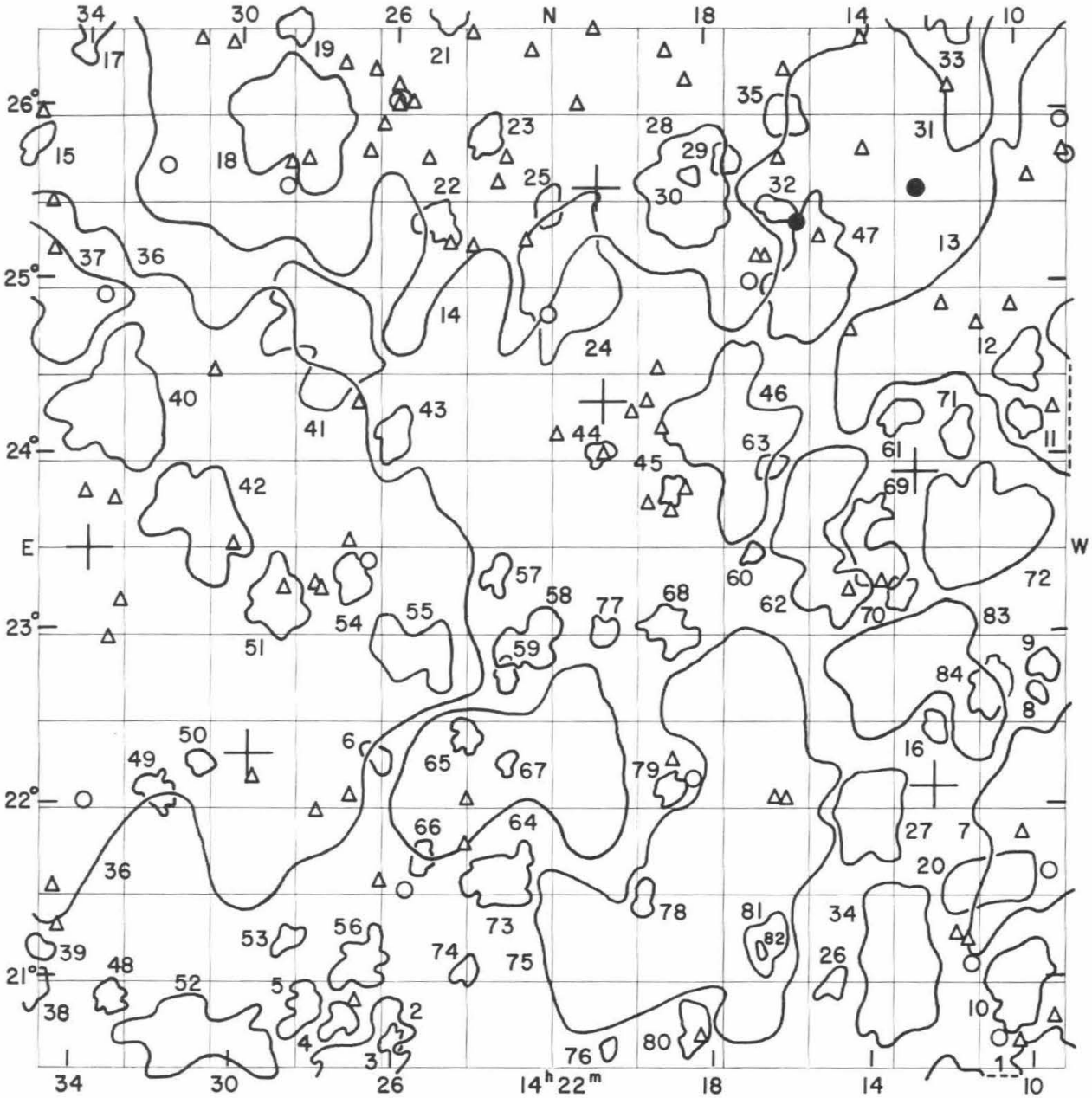
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1341.6 + 2614	medium compact	694	12.5	Near	9
1342.1 + 2033	medium compact	123	3.6	MD	5
1343.3 + 2245	open	126	6.1	Near	7
1343.5 + 2151	open	86	1.2	ED	6
1344.0 + 2555	medium compact	151	1.5	VD	10
1344.8 + 2140	medium compact	89	1.1	ED	3
1344.9 + 2436	medium compact	195	5.4	MD	8
1347.1 + 2515	medium compact	103	1.4	VD	35
1347.5 + 2405	compact	98	1.0	ED	38
1348.6 + 2135	compact	108	1.0	ED	4
1349.1 + 2414	medium compact	120	3.2	D	34
1349.6 + 2447	medium compact	59	0.9	ED	37
1350.6 + 2053	compact	55	0.4	ED	13
1350.9 + 2142	medium compact	214	8.5	Near	52
1352.5 + 2438	medium compact	119	2.9	D	33
1352.9 + 2625	open	104	2.7	D	32
1353.2 + 2508	medium compact	240	12.7	Near	11
1353.9 + 2539	open	72	2.3	VD	36
1355.1 + 2237	medium compact	310	7.8	Near	51
1355.4 + 2059	medium compact	115	3.5	MD	14
1357.7 + 2118	compact	68	1.2	ED	40
1358.0 + 2313	compact	129	1.4	ED	50
1358.2 + 2420	compact	53	1.3	VD	31
1358.5 + 2249	open	80	2.1	ED	41
1359.0 + 2208	medium compact	161	3.6	VD	1
1359.7 + 2415	compact	87	0.9	ED	30
1359.8 + 2455	medium compact	234	4.5	MD	26
1400.1 + 2335	medium compact	233	4.3	VD	27
1400.2 + 2037	open	129	1.5	ED	57
1400.7 + 2255	medium compact	104	1.6	ED	48
1400.8 + 2201	compact	134	1.6	ED	55
1400.8 + 2416	medium compact	73	1.0	ED	29
1400.9 + 2102	compact	99	1.0	ED	56
1400.9 + 2237	compact	137	1.4	ED	49
1401.3 + 2125	medium compact	83	1.3	ED	47
1401.3 + 2611	medium compact	120	1.3	VD	23
1401.5 + 2359	medium compact	66	0.8	ED	28
1401.8 + 2513	medium compact	98	1.0	ED	24
1402.2 + 2246	medium compact	117	1.6	VD	46
1402.4 + 2045	compact	82	0.9	ED	2
1402.4 + 2205	open	130	3.8	D	44
1402.6 + 2118	medium compact	218	2.0	ED	43
1402.7 + 2138	medium compact	70	1.1	ED	54
1403.0 + 2313	medium compact	117	1.8	ED	45
1403.0 + 2429	medium compact	204	4.3	MD	25
1403.8 + 2524	compact	171	2.8	VD	22
1404.2 + 2334	medium compact	79	1.3	ED	19
1404.7 + 2404	compact	102	1.3	ED	21
1404.7 + 2616	open	135	3.5	D	20
1405.2 + 2320	medium compact	57	0.9	ED	18
1405.7 + 2501	medium compact	122	1.4	ED	16
1406.1 + 2343	medium compact	172	3.0	D	17
1406.2 + 2546	open	79	1.7	ED	15
1407.8 + 2154	medium compact	377	7.8	MD	42
1408.3 + 2115	medium compact	75	2.2	ED	53
1408.3 + 2317	medium compact	176	2.0	VD	39
1410.0 + 2509	open	199	8.1	Near	12

Average number of galaxies per cluster = 139.5

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 43.3 +22 18		15.7		compact
13 43.4 +22 20		15.2		
13 43.7 +22 22		15.3		compact
13 43.8 +22 09		15.1		
13 43.9 +23 18		15.3		
13 44.2 +21 06		14.8		
13 44.2 +22 56		15.5		
13 44.2 +23 20		15.4		
13 44.3 +22 56		15.2		compact
13 44.7 +25 14		15.5		
13 44.9 +22 05		15.7		
13 45.4 +22 22		15.6		
13 45.9 +25 21		15.6		
13 45.9 +25 59		15.4		double system
13 46.0 +25 55		15.5		double system
13 46.2 +24 15	941*	15.2		
13 46.3 +26 19		15.7		
13 47.5 +25 26		15.3		
13 48.2 +25 13		14.9		double system
13 48.4 +25 25		15.4		
13 48.6 +21 47		15.4		
13 48.6 +22 14		15.5		
13 48.7 +25 20		14.6		double system
13 48.8 +24 15		15.3		
13 48.9 +21 47		15.2		
13 49.9 +22 46	949*	15.4		
13 50.0 +21 47		14.5		
13 50.0 +21 50		15.5		compact
13 50.3 +21 53		15.7		
13 50.3 +25 00		14.9		
13 50.4 +25 17		15.3		extremely compact
13 50.5 +20 37		15.6		very compact
13 50.6 +21 10		15.4		
13 50.7 +24 48		15.6		
13 50.8 +24 37		15.5		extremely compact
13 51.0 +23 17		15.7		diffuse
13 51.2 +25 07		15.5		
13 51.3 +25 04		15.7		
13 52.0 +25 23	4342*	15.4		
13 52.1 +22 05		15.4		
13 52.1 +24 00		15.3		
13 52.3 +20 58	956*	15.7		double nebula
13 52.4 +22 05		15.5		extremely compact
13 52.6 +25 21	4343*	15.6		
13 52.9 +25 15	4344*	15.5		
13 52.9 +25 17	4345*	14.7		
13 53.1 +25 18		15.3		triple system
13 53.2 +25 17		15.7		
13 53.3 +25 23	4346*	15.4		
13 53.4 +25 26	4348*	15.7		
13 53.5 +25 23	4349*	15.3		
13 53.5 +26 05	961*	15.5		
13 53.8 +24 44		15.5		
13 53.8 +25 16		15.6		double system
13 53.9 +25 25		15.7		very compact
13 54.5 +26 09		15.6		

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	o	'				
13	54.7	+22	15		15.6		
13	54.9	+24	29		15.2		
13	55.4	+26	00		15.7		
13	55.7	+20	39		15.2		
13	55.7	+22	02		15.4		
13	56.0	+23	08		15.1		
13	56.0	+23	10		15.3		
13	56.1	+24	23		15.7		very diffuse
13	56.1	+25	47		15.2		
13	56.5	+22	14		15.6		
13	58.2	+20	56		15.4		
13	58.2	+26	14		15.7		
13	58.3	+25	33		15.7		diffuse
13	58.7	+21	28		15.1		double system
13	59.8	+26	18		15.0		
13	59.9	+25	34		15.5		
14	02.5	+21	53		14.9		very compact
14	02.9	+21	17		15.6		compact
14	03.4	+25	28	4373*	15.3		
14	05.5	+23	20		15.3		
14	08.3	+22	11		15.7		
14	08.7	+25	44	4381*	14.8		
14	08.8	+25	45	4382*	15.4		
14	08.8	+25	56	5498	15.0		



FIELD No. 133

14^h22^m $+23^o30'$

Survey Plate No. 61

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19224	14 12 21.9	+ 22 06 21	6.40
19232	14 12 44.1	+ 23 55 07	6.72
19398	14 20 42.7	+ 24 20 00	8.2
19400	14 20 52.1	+ 25 33 50	6.15
19599	14 29 45.3	+ 22 17 59	8.48
19687	14 33 51.2	+ 23 28 01	6.48

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1407.8 + 2154	medium compact	377	7.8	MD	7
1409.6 + 2247	compact	73	0.9	ED	9
1409.7 + 2238	compact	66	0.5	ED	8
1410.0 + 2412	medium compact	70	1.1	ED	11
1410.0 + 2431	compact	150	1.6	ED	12
1410.0 + 2509	open	199	8.1	Near	13
1410.3 + 2056	medium compact	91	2.2	D	10
1410.8 + 2005	medium compact	162	5.4	MD	1
1410.9 + 2240	medium compact	84	1.5	VD	84
1411.0 + 2133	medium compact	84	2.2	D	20
1411.0 + 2334	medium compact	135	3.7	D	72
1411.5 + 2635	open	138	4.7	D	31
1411.6 + 2406	medium compact	113	1.2	ED	71
1411.6 + 2631	medium compact	114	1.4	ED	33
1412.2 + 2227	compact	65	0.8	VD	16
1412.8 + 2245	medium compact	170	4.5	D	83
1413.1 + 2313	compact	102	0.9	ED	70
1413.1 + 2414	compact	98	1.1	ED	61
1413.3 + 2105	medium compact	117	3.6	MD	34
1413.9 + 2330	medium compact	93	2.0	VD	69
1414.0 + 2156	compact	104	2.4	VD	27
1415.0 + 2058	medium compact	80	0.9	ED	26
1415.3 + 2333	medium compact	119	3.5	D	62
1415.3 + 2500	open	102	3.2	D	47
1416.0 + 2558	open	73	1.3	ED	35
1416.2 + 2525	compact	97	0.9	ED	32
1416.4 + 2357	compact	66	0.8	ED	63
1416.7 + 2112	medium compact	92	1.5	VD	81
1416.8 + 2110	compact	52	0.4	ED	82
1416.9 + 2326	medium compact	77	0.6	ED	60
1417.3 + 2408	open	114	3.8	D	46
1417.5 + 2542	compact	61	0.9	ED	29
1418.0 + 2139	medium compact	455	9.1	MD	75
1418.5 + 2045	open	98	1.1	ED	80
1418.5 + 2531	medium compact	91	3.1	D	28
1418.5 + 2536	medium compact	48	0.5	ED	30
1419.0 + 2206	medium compact	77	0.9	ED	79
1419.0 + 2300	open	64	1.5	VD	68
1419.0 + 2349	medium compact	62	0.8	ED	45
1419.7 + 2128	medium compact	83	0.8	ED	78
1420.6 + 2036	compact	56	0.5	ED	76
1420.6 + 2259	compact	110	0.8	ED	77
1420.8 + 2401	medium compact	57	0.8	ED	44
1421.5 + 2503	medium compact	133	3.5	MD	24
1422.1 + 2526	compact	101	1.0	ED	25
1422.6 + 2257	medium compact	94	1.8	VD	58
1423.0 + 2213	medium compact	284	6.0	D	64
1423.2 + 2214	medium compact	61	0.5	ED	67
1423.2 + 2245	medium compact	95	0.9	ED	59
1423.3 + 2135	medium compact	300	2.0	ED	73
1423.4 + 2319	medium compact	82	0.9	ED	57
1423.8 + 2550	compact	99	1.1	ED	23
1424.0 + 2613	medium compact	450	18.2	Near	14
1424.1 + 2104	compact	76	0.8	ED	74
1424.1 + 2224	medium compact	84	0.9	VD	65
1424.6 + 2632	medium compact	109	1.1	ED	21
1425.0 + 2520	medium compact	94	1.3	ED	22

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1425.3 + 2142	compact	80	0.8	ED	66
1425.5 + 2253	medium compact	113	2.2	D	55
1426.0 + 2039	compact	71	0.7	ED	3
1426.0 + 2407	medium compact	117	1.3	VD	43
1426.4 + 2030	medium compact	215	2.7	D	2
1426.4 + 2216	compact	71	0.8	ED	6
1426.8 + 2105	medium compact	115	1.6	ED	56
1427.0 + 2317	compact	89	1.3	VD	54
1427.2 + 2047	medium compact	80	1.0	ED	4
1427.8 + 2443	medium compact	212	3.6	VD	41
1428.1 + 2050	compact	138	1.2	VD	5
1428.6 + 2114	compact	70	0.9	ED	53
1428.6 + 2629	medium compact	77	1.0	ED	19
1428.7 + 2555	compact	32	3.6	D	18
1429.0 + 2310	medium compact	61	2.0	VD	51
1430.8 + 2040	medium compact	115	3.2	VD	52
1430.9 + 2214	medium compact	62	0.8	ED	50
1431.0 + 2338	medium compact	124	3.1	D	42
1431.9 + 2204	medium compact	79	1.1	ED	49
1433.0 + 2053	compact	108	0.9	ED	48
1433.1 + 2415	open	129	3.5	D	40
1434.0 + 2625	medium compact	110	1.3	ED	17
1434.4 + 2451	medium compact	108	3.1	MD	37
1434.8 + 2109	compact	74	0.8	ED	39
1435.0 + 2055	medium compact	76	1.1	ED	38
1435.4 + 2545	compact	95	0.9	ED	15
1442.0 + 2414	medium compact	1413	31.2	Near	36

Average number of galaxies per cluster = 129.0

GALAXIES

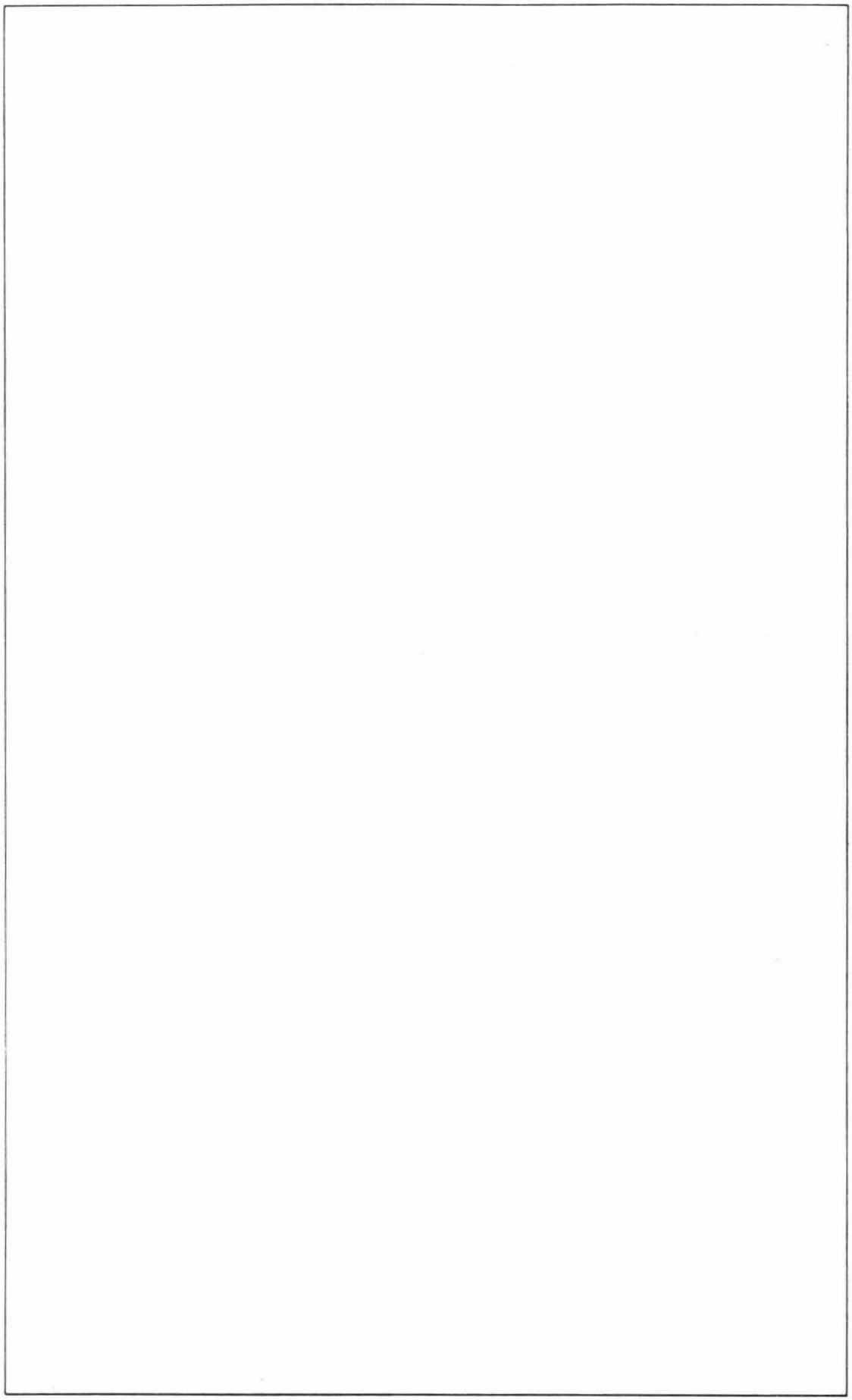
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
14 08.7 + 25 44	4381*	14.8		
14 08.8 + 25 45	4382*	15.4		
14 08.8 + 25 56	5498	15.0		
14 09.2 + 24 16		15.7		diffuse
14 09.4 + 20 46		15.6		
14 09.5 + 21 37		15.0		
14 09.7 + 25 36		15.7		
14 10.2 + 21 50		15.7		
14 10.2 + 24 53	5508	15.3		
14 10.3 + 20 38		15.2		compact
14 10.8 + 20 40	5513	14.1		
14 11.1 + 24 46		15.5		compact
14 11.5 + 21 05	5518	15.0		
14 11.5 + 21 14		15.4		
14 11.7 + 26 09		15.7		
14 11.8 + 21 16		15.5		
14 12.0 + 24 53		15.6		
14 12.6 + 25 33	5523	13.4		m_H = 12.8 S
14 13.6 + 23 17		15.3		diffuse
14 13.9 + 26 25		15.7		
14 14.0 + 25 47		15.4		
14 14.3 + 24 44		15.5		
14 14.4 + 23 14		15.5		

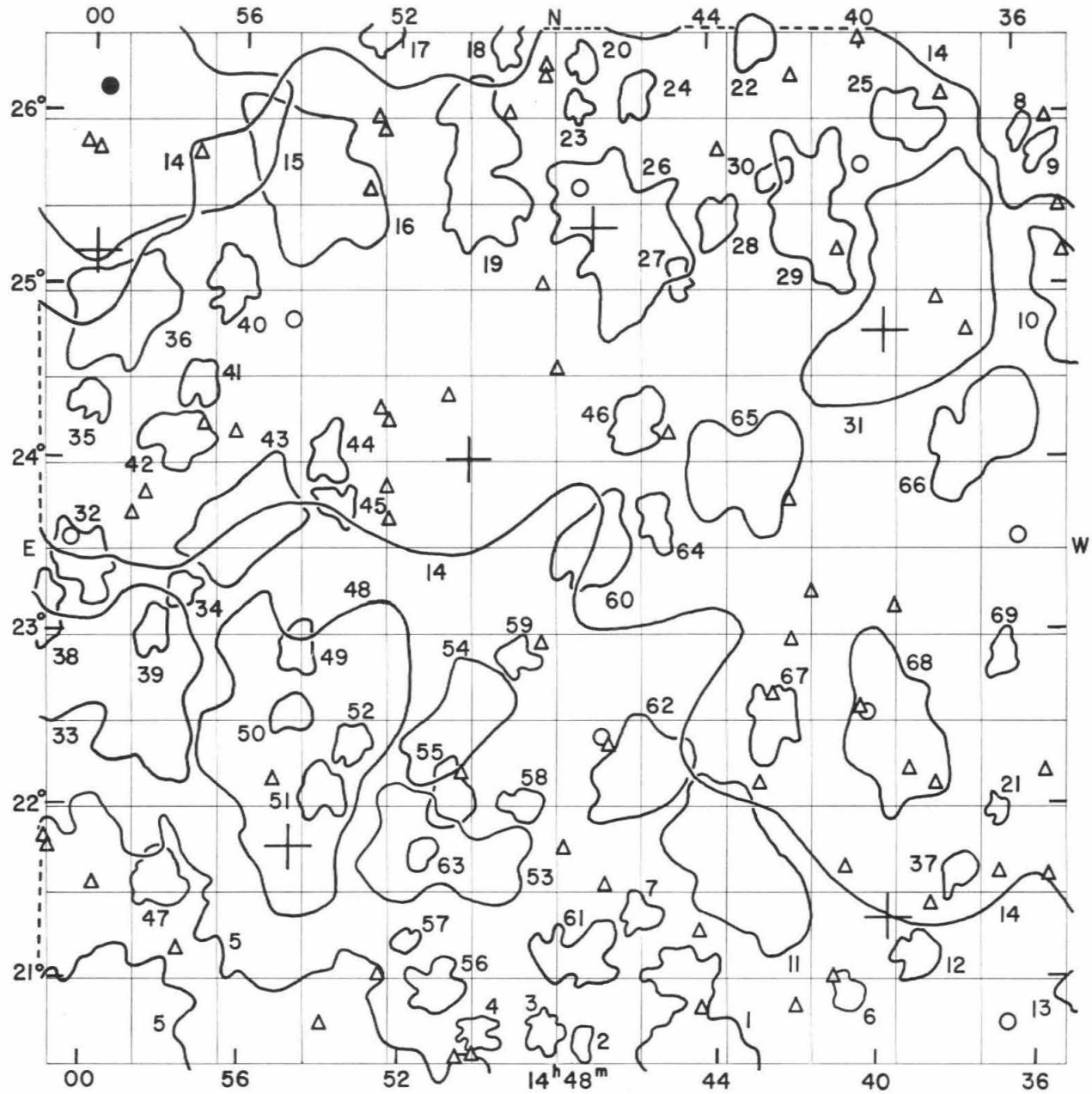
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
14 15.1 + 25 17		15.3		
14 15.7 + 25 22	5548	13.1	+ 4930	m_H = 12.9
14 15.9 + 26 15		15.6		
14 16.1 + 22 02		15.7		
14 16.1 + 25 44		15.7		
14 16.4 + 22 03		15.4		
14 16.5 + 25 10		15.3		
14 16.7 + 25 10		15.7		
14 16.9 + 25 02	5559	15.0		
14 18.3 + 20 41		15.3		
14 18.4 + 22 10		14.7		
14 18.5 + 26 11		15.7		
14 18.6 + 23 50		15.6		
14 18.9 + 22 16		15.7		
14 18.9 + 23 43	5581	15.1		
14 19.1 + 26 21		15.7		very compact
14 19.2 + 24 10		15.5		
14 19.3 + 24 31		15.7		
14 19.6 + 23 45		15.6		compact
14 19.6 + 24 20		15.6		
14 20.0 + 24 16		15.7		
14 20.6 + 24 01	1006*	15.3		
14 20.9 + 26 29	4412*	15.1		
14 21.4 + 26 03		15.6		double system
14 21.9 + 24 08		15.6		
14 22.1 + 24 50	5610	14.5		
14 22.6 + 26 22		15.7		very faint spiral arms
14 22.7 + 25 15		15.4		
14 23.2 + 25 45	4418*	15.1		compact
14 23.4 + 25 36	4420*	15.5		
14 24.0 + 25 14		15.6		
14 24.1 + 26 28	4423*	15.5		
14 24.2 + 21 47		15.6		compact
14 24.2 + 22 03		15.4		
14 24.6 + 25 15		15.6		
14 25.2 + 25 44		15.4		
14 25.6 + 26 04		15.4		
14 25.7 + 21 32		14.7		
14 25.9 + 26 05	1017*	14.9		
14 26.0 + 26 03	1018*	15.6		extremely compact
14 26.0 + 26 10	1019*	15.3		
14 26.1 + 26 04	5629	14.2		
14 26.3 + 21 34		15.7		extremely diffuse
14 26.4 + 25 56		15.7		
14 26.6 + 26 15	1020*	15.2		
14 26.7 + 23 25	5637	14.6		
14 26.7 + 25 46		15.1		
14 26.9 + 20 53	1021*	15.2		
14 27.0 + 24 19		15.7		
14 27.1 + 22 04		15.5		
14 27.2 + 23 32		15.6		
14 27.4 + 26 17		15.5		
14 27.9 + 21 59		15.6		
14 27.9 + 23 15		15.3		compact
14 28.0 + 23 17		15.1		
14 28.3 + 25 44		15.3		
14 28.8 + 23 16		15.7		
14 28.8 + 25 43		15.3		
14 28.9 + 25 35	5659	15.0		

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
14 29.6	+ 22 10		15.7		
14 30.1	+ 23 30		15.7		
14 30.2	+ 26 24		15.2		
14 30.6	+ 24 30		15.6		
14 31.1	+ 26 25		15.6		
14 32.0	+ 25 41	5677	14.8		
14 33.0	+ 23 11		15.5		
14 33.2	+ 22 57		15.5		
14 33.2	+ 23 45		15.7		
14 33.5	+ 24 56		15.0		
14 33.8	+ 22 01		14.6		
14 34.0	+ 23 48		15.6		compact
14 34.4	+ 21 18		15.6		
14 34.6	+ 21 31		15.7		compact
14 34.8	+ 25 12		15.7		
14 34.9	+ 25 28		15.6		
14 35.2	+ 25 59		15.2		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5548	-	-	12.92	Sa	12.8	Sa	-	-





FIELD No. 134

14^h48^m $+23^o30'$

Survey Plate No. 102

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19798	14 39 32.1	+ 24 45 04	7.61
19800	14 39 37.3	+ 21 20 13	6.43
19947	14 47 02.3	+ 25 21 27	6.78
20014	14 50 15.7	+ 24 00 18	7.31
20120	14 54 48.4	+ 21 45 22	6.24
20224	14 59 55.0	+ 25 12 17	4.93

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1434.4 + 2451	medium compact	108	3.1	MD	10
1435.0 + 2055	medium compact	76	1.1	ED	13
1435.4 + 2545	compact	95	0.9	ED	9
1435.9 + 2552	medium compact	76	0.8	ED	8
1436.6 + 2250	medium compact	90	1.2	VD	69
1436.9 + 2158	compact	73	0.7	ED	21
1437.0 + 2409	medium compact	110	3.2	D	66
1438.0 + 2136	compact	87	1.1	ED	37
1438.4 + 2457	medium compact	148	6.1	D	31
1438.8 + 2557	medium compact	85	1.9	VD	25
1439.0 + 2107	medium compact	82	1.5	VD	12
1439.5 + 2225	medium compact	102	3.9	D	68
1440.8 + 2054	medium compact	73	1.1	ED	6
1441.3 + 2526	medium compact	101	3.3	MD	29
1442.0 + 2414	medium compact	1413	31.2	Near	14
1442.2 + 2539	medium compact	94	0.9	ED	30
1442.6 + 2229	open	133	1.9	ED	67
1442.8 + 2625	compact	145	1.4	ED	22
1443.2 + 2356	open	155	3.7	VD	65
1443.6 + 2139	medium compact	126	4.3	MD	11
1443.8 + 2521	open	116	1.4	ED	28
1444.6 + 2041	open	156	3.7	MD	1
1444.8 + 2503	medium compact	76	0.9	ED	27
1445.4 + 2338	medium compact	182	1.3	ED	64
1445.9 + 2213	open	103	3.0	VD	62
1445.9 + 2608	medium compact	125	1.3	ED	24
1446.0 + 2123	open	85	1.2	VD	7
1446.0 + 2413	compact	181	1.8	VD	46
1446.2 + 2518	medium compact	164	4.4	D	26
1447.1 + 2329	open	106	2.5	VD	60
1447.2 + 2619	compact	123	1.0	ED	20
1447.4 + 2603	medium compact	64	0.8	ED	23
1447.5 + 2036	compact	74	0.8	ED	2
1447.7 + 2107	medium compact	130	2.1	D	61
1448.5 + 2040	compact	88	1.3	ED	3
1449.0 + 2200	medium compact	108	1.2	ED	58
1449.1 + 2252	compact	64	1.3	VD	59
1449.2 + 2626	compact	132	1.3	VD	18
1449.9 + 2541	open	113	3.5	VD	19
1450.0 + 2040	compact	79	1.2	ED	4
1450.5 + 2230	medium compact	146	3.2	D	54
1450.8 + 2204	compact	109	1.8	VD	55
1451.0 + 2144	medium compact	125	4.1	MD	53
1451.1 + 2057	medium compact	168	1.7	VD	56
1451.6 + 2144	compact	80	0.8	ED	63
1452.0 + 2114	compact	87	0.8	ED	57
1452.5 + 2631	medium compact	150	1.4	ED	17
1453.3 + 2221	compact	145	1.2	ED	52
1453.6 + 2345	compact	118	1.2	VD	45
1453.9 + 2401	compact	102	1.5	VD	44
1454.0 + 2206	open	76	1.6	VD	51
1454.2 + 2537	medium compact	151	4.3	D	16
1454.6 + 2221	medium compact	275	7.2	MD	48
1454.7 + 2255	compact	175	1.3	ED	49
1454.8 + 2233	compact	133	1.2	ED	50
1456.0 + 2339	medium compact	154	3.3	D	43
1456.4 + 2503	medium compact	109	1.7	ED	40

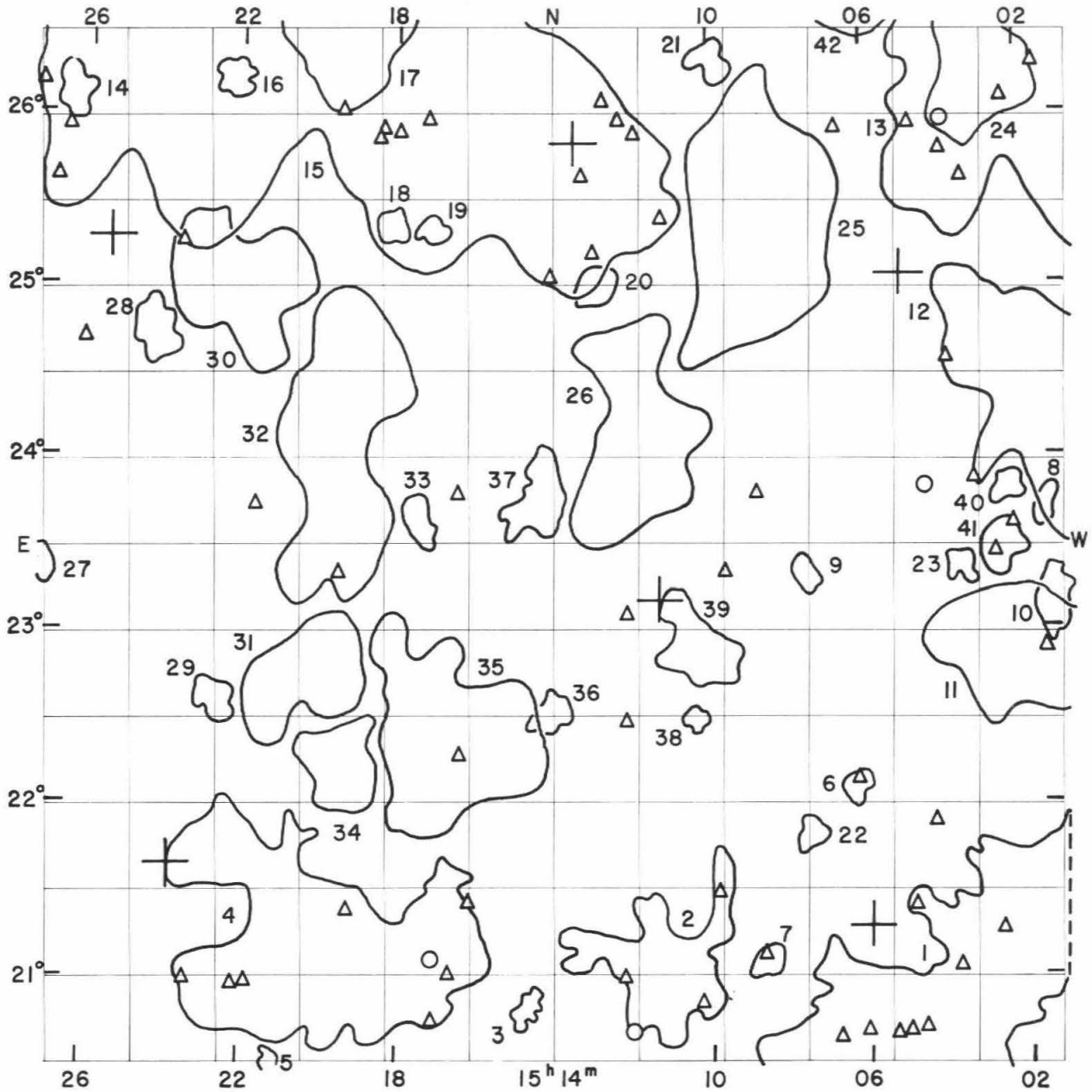
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1457.1 + 2427	compact	145	1.3	ED	41
1457.6 + 2316	compact	123	1.1	ED	34
1457.8 + 2407	open	87	2.0	VD	42
1458.1 + 2135	compact	279	1.8	ED	47
1458.4 + 2301	medium compact	134	1.3	ED	39
1459.3 + 2453	medium compact	94	3.5	D	36
1459.8 + 2043	open	741	13.5	Near	5
1500.0 + 2420	open	101	1.3	ED	35
1500.1 + 2325	medium compact	121	2.1	VD	32
1500.4 + 2246	medium compact	270	6.3	D	33
1500.6 + 2559	open	259	9.8	Near	15
1501.1 + 2308	compact	107	1.5	VD	38

Average number of galaxies per cluster = 150.8

GALAXIES

Position α 1950 δ h m o ′	NGC IC*	m_p	V_s km/sec	Remarks
14 34.8 + 25 12		15.7		
14 34.9 + 25 28		15.6		
14 35.2 + 25 59		15.2		
14 35.6 + 21 35		15.6		diffuse
14 35.6 + 22 11		15.2		
14 36.1 + 23 33	4475*	15.0		triple system
14 36.6 + 20 43	5702	14.5		
14 36.8 + 21 36		15.6		
14 37.4 + 24 45		15.4		
14 37.9 + 26 07		15.6		
14 38.1 + 24 56		15.5		
14 38.3 + 22 07		15.5		
14 38.5 + 21 25		15.5		
14 39.0 + 22 12		15.7		
14 39.3 + 23 09		15.3		
14 40.0 + 25 43		15.0		
14 40.0 + 26 27		15.5		
14 40.1 + 22 33		14.8		
14 40.2 + 22 34		15.4		double system
14 40.7 + 21 38		15.7		
14 40.7 + 25 13		15.6		
14 41.0 + 21 00		15.7		compact
14 41.4 + 23 14		15.1		
14 41.8 + 26 14		15.7		diffuse
14 41.9 + 20 50	1052*	15.3		
14 42.0 + 22 58		15.6		
14 42.0 + 23 46	4495*	15.7		
14 42.4 + 22 39		15.4		
14 42.8 + 22 07	5748	15.4		
14 43.8 + 25 48		15.4		
14 44.4 + 20 49		15.7		
14 44.4 + 21 16		15.3		
14 45.1 + 24 09		15.1		
14 46.7 + 22 20		15.7		compact
14 46.8 + 21 32		15.4		extremely compact
14 46.8 + 22 24		15.0		
14 47.3 + 25 35		14.8		
14 47.8 + 21 45		15.7		diffuse

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
14 48.0 + 24 31		15.6		double system
14 48.2 + 26 13		15.7		compact
14 48.2 + 26 17		15.6		
14 48.3 + 25 01		15.7		
14 48.4 + 22 56		15.7		very compact
14 49.2 + 26 01		15.5		
14 50.0 + 20 33		15.5		very compact
14 50.3 + 22 12		15.7		
14 50.5 + 20 32		15.7		
14 50.8 + 24 22		15.7		
14 52.2 + 23 39		15.6		
14 52.3 + 23 50	4517*	15.5		
14 52.3 + 24 13		15.4		compact
14 52.4 + 21 01		15.6		
14 52.4 + 25 55		15.6		
14 52.5 + 24 17		15.2		
14 52.6 + 26 00		15.3		
14 52.8 + 25 34		15.7		
14 53.9 + 20 44		15.3		compact
14 54.7 + 24 48		14.3		double system
14 55.2 + 22 09		15.6		
14 56.2 + 24 09		15.5		double nebula
14 57.0 + 24 13		15.1		double system
14 57.2 + 25 46	4521*	15.3		
14 57.5 + 21 10		15.7		diffuse
14 58.5 + 23 48		15.7		
14 58.8 + 23 40		15.6		
14 59.6 + 26 10	5827	13.7		
14 59.7 + 21 32		15.2		
14 59.9 + 25 47	4524*	15.6		
15 00.2 + 25 50	4525*	15.7		
15 00.4 + 23 31	5829+4526*	14.6		double system
15 00.9 + 21 44		15.7		
15 01.0 + 21 48		15.6		



FIELD No. 135

15^h14^m $+23^\circ30'$

Survey Plate No. 87

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
20342	15 05 06.2	+ 25 03 46	5.03
20365	15 05 56.0	+ 21 16 38	8.1
20474	15 11 19.1	+ 23 10 04	6.25
20525	15 13 31.9	+ 25 49 35	6.67
20748	15 23 50.0	+ 21 38 01	8.7
20786	15 25 29.7	+ 15 16 28	6.26

CLUSTERS OF GALAXIES

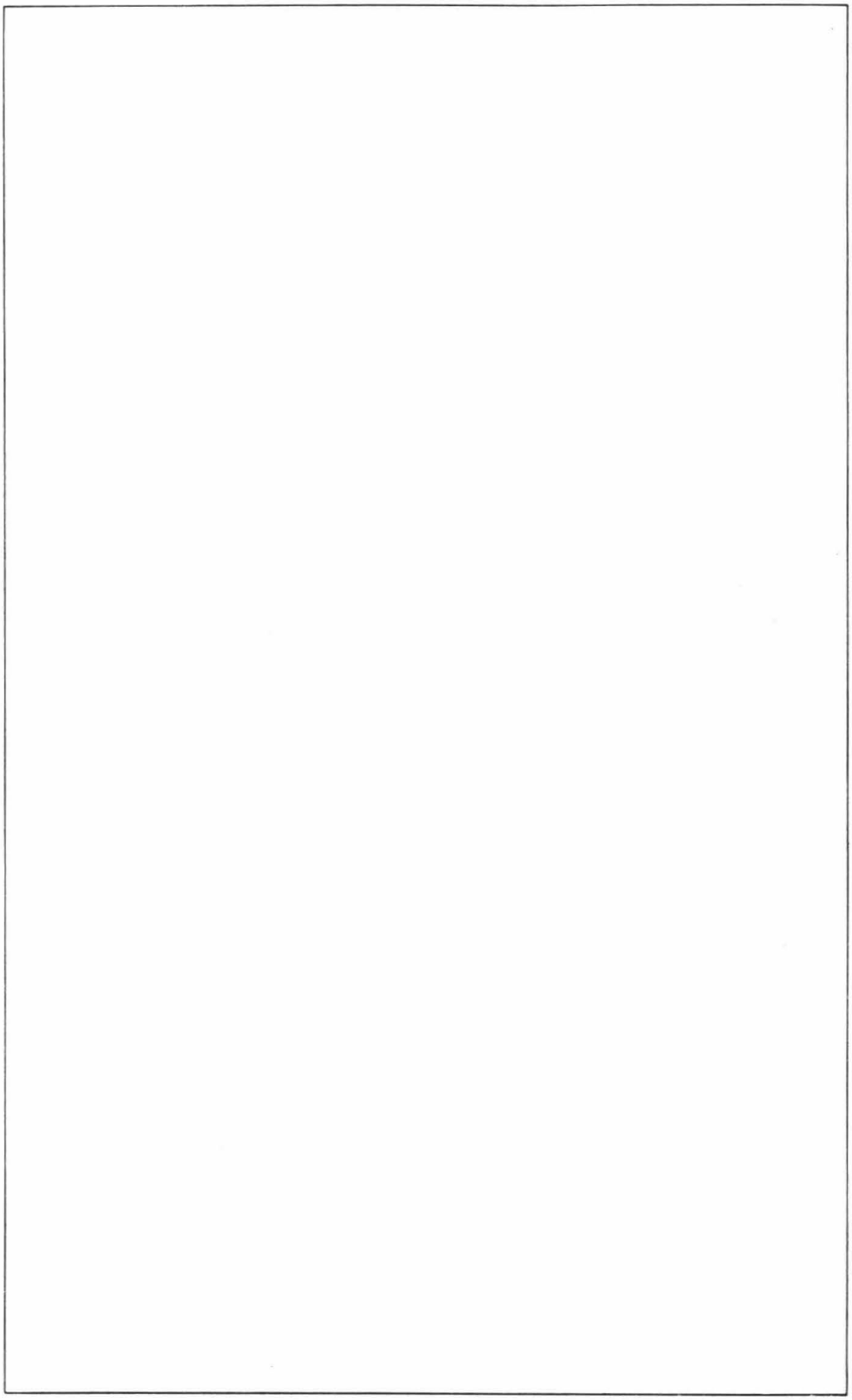
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1442.0 + 2414	medium compact	1413	31.2	Near	12
1459.8 + 2043	open	741	13.5	Near	1
1500.4 + 2246	medium compact	270	6.3	D	11
1500.6 + 2559	open	259	9.8	Near	13
1501.1 + 2308	compact	107	1.5	VD	10
1501.4 + 2341	compact	57	0.8	ED	8
1502.3 + 2350	open	75	1.0	ED	40
1502.5 + 2328	medium compact	58	1.5	VD	41
1502.8 + 2613	medium compact	118	3.6	D	24
1503.6 + 2321	medium compact	64	0.9	ED	23
1506.2 + 2205	compact	66	0.9	ED	6
1506.3 + 2703	medium compact	201	6.4	MD	42
1507.4 + 2149	compact	82	1.0	ED	22
1507.5 + 2319	compact	67	0.9	ED	9
1508.6 + 2105	open	60	1.0	ED	7
1508.6 + 2522	open	130	6.2	D	25
1509.8 + 2617	medium compact	65	1.3	ED	21
1510.2 + 2253	medium compact	85	2.3	VD	39
1510.4 + 2229	compact	62	0.7	ED	38
1511.1 + 2102	open	123	4.3	Near	2
1511.7 + 2406	open	115	4.8	MD	26
1512.9 + 2459	medium compact	104	1.2	ED	20
1514.0 + 2231	compact	112	1.3	ED	36
1514.3 + 2345	medium compact	105	2.1	VD	37
1514.6 + 2047	medium compact	62	1.0	ED	3
1516.5 + 2221	open	175	5.6	MD	35
1517.0 + 2519	medium compact	69	0.9	ED	19
1517.4 + 2338	medium compact	85	1.3	ED	33
1518.1 + 2520	compact	105	1.0	ED	18
1519.3 + 2631	open	112	4.5	D	17
1519.4 + 2213	open	89	2.6	VD	34
1519.4 + 2610	open	396	14.3	Near	15
1519.5 + 2401	open	131	5.9	MD	32
1519.7 + 2107	open	236	7.8	Near	4
1520.3 + 2244	medium compact	147	3.6	VD	31
1521.1 + 2029	compact	51	0.7	ED	5
1522.0 + 2500	medium compact	118	4.3	D	30
1522.2 + 2611	medium compact	61	1.1	ED	16
1522.6 + 2235	medium compact	106	1.3	ED	29
1524.1 + 2444	open	82	1.6	ED	28
1526.4 + 2607	medium compact	83	1.3	VD	14
1527.3 + 2323	medium compact	115	1.3	ED	27

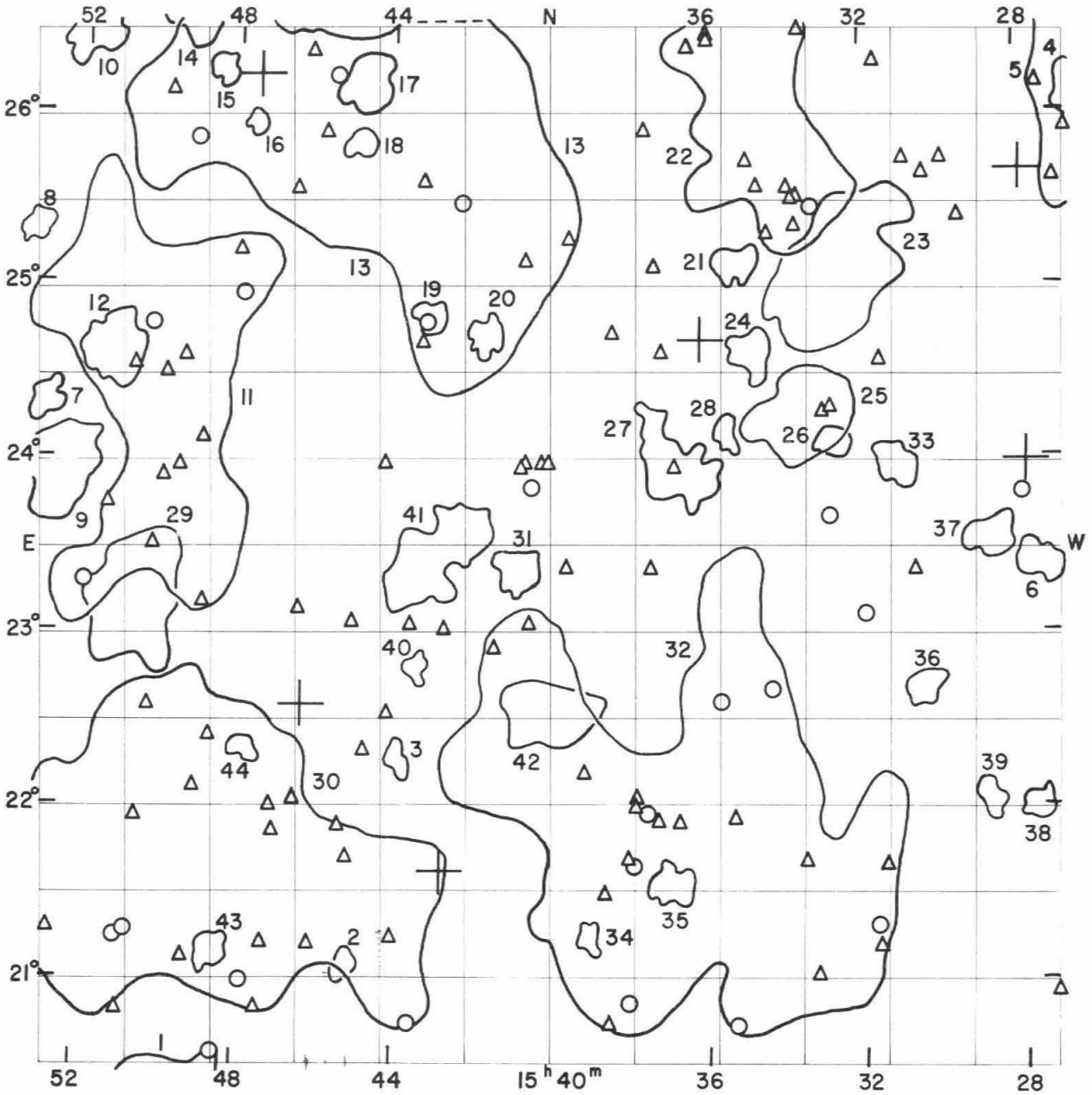
Average number of galaxies per cluster = 161.0

GALAXIES

Position α 1950 δ (h m o ′)	NGC IC*	m_p	V_s km/sec	Remarks
15 01.4 + 22 54		15.7		
15 01.6 + 26 17	4530*	15.3		double system
15 02.2 + 23 36	4531*	15.6		compact
15 02.4 + 26 05		15.5		diffuse
15 02.6 + 21 16	5842	15.2		
15 02.7 + 23 26		15.6		compact

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 03.2 + 23 53		15.7		system with jets
15 03.4 + 25 38		15.7		
15 03.7 + 21 02		15.4		
15 03.9 + 24 35		15.6		diffuse spiral
15 03.9 + 25 58		15.0		
15 04.0 + 25 48		15.7		
15 04.3 + 21 54		15.1		
15 04.4 + 23 50		14.7		
15 04.5 + 20 42		15.5		double system
15 04.8 + 21 25		15.2		
15 04.8 + 25 57		15.3		compact
15 04.9 + 20 40		15.3		
15 05.3 + 20 39		15.5		compact
15 06.0 + 20 41		15.7		very compact
15 06.2 + 22 08		15.3		
15 06.7 + 20 38		15.6		compact
15 06.7 + 25 55		15.6		
15 08.6 + 21 07		15.7		very diffuse
15 08.8 + 23 48		15.5		
15 09.6 + 23 20		15.4		
15 09.8 + 21 29		15.6		
15 10.2 + 20 50		15.3		double nebula
15 11.2 + 25 23		15.6		
15 11.9 + 25 53		15.7		
15 12.0 + 20 40		15.0		
15 12.1 + 22 29		15.3		
15 12.1 + 23 05		15.6		compact
15 12.2 + 20 59		15.4		compact
15 12.3 + 25 57		15.7		
15 12.8 + 26 05		15.6		diffuse
15 13.0 + 25 11		15.7		
15 13.2 + 25 38		15.2		
15 14.1 + 25 02		15.1		double system
15 16.1 + 21 25		15.4		
15 16.4 + 22 16		15.6		compact
15 16.4 + 23 47		15.7		
15 16.7 + 21 00		15.6		
15 17.1 + 20 44		15.7		double system
15 17.1 + 21 05	5910	14.9		triple system
15 17.2 + 25 58		15.4		compact
15 18.0 + 25 55		15.2		compact
15 18.4 + 25 55		15.6		
15 18.5 + 25 52		15.7		
15 19.2 + 21 23		15.4		triple system
15 19.4 + 26 01		15.4		
15 19.5 + 23 25		15.4		
15 21.6 + 23 44		15.7		extremely diffuse
15 21.9 + 20 57		15.4		double system
15 22.2 + 20 56		15.5		double system
15 23.4 + 20 58		15.5		
15 23.6 + 25 16		15.6		
15 26.1 + 24 42		15.4		extremely compact
15 26.6 + 25 55		15.7		
15 26.9 + 25 38		15.1		
15 27.3 + 26 10		15.4		





FIELD No. 136

15^h40^m $+23^\circ30'$

Survey Plate No. 1119

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
20837	15 27 43.9	+ 23 59 15	7.54
20840	15 27 50.1	+ 25 40 43	8.1
21033	15 36 07.7	+ 24 41 04	7.12
21171	15 42 43.9	+ 21 35 53	7.44
21249	15 46 18.3	+ 22 34 05	7.04
21276	15 47 29.7	+ 26 13 13	4.73

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1519.4 + 2610	open	396	14.3	Near	5
1526.4 + 2607	medium compact	83	1.3	VD	4
1527.3 + 2323	medium compact	115	1.3	ED	6
1527.6 + 2159	compact	91	0.9	ED	38
1528.7 + 2202	medium compact	66	0.9	ED	39
1528.7 + 2333	medium compact	134	1.4	ED	37
1530.4 + 2240	medium compact	87	1.2	ED	36
1531.0 + 2357	medium compact	97	1.3	ED	33
1532.6 + 2505	medium compact	99	4.4	MD	23
1532.7 + 2405	compact	80	1.0	ED	26
1533.4 + 2415	medium compact	171	3.0	D	25
1534.4 + 2553	open	122	6.0	Near	22
1534.8 + 2435	compact	197	1.4	ED	24
1535.2 + 2507	compact	109	1.3	ED	21
1535.5 + 2408	medium compact	95	0.9	ED	28
1536.5 + 2147	medium compact	293	12.4	Near	32
1536.7 + 2355	medium compact	119	2.4	VD	27
1536.8 + 2132	medium compact	110	1.4	VD	35
1539.0 + 2114	medium compact	57	0.8	ED	34
1540.0 + 2230	open	75	2.5	VD	42
1540.8 + 2320	open	80	1.4	ED	31
1541.6 + 2441	compact	109	1.2	ED	20
1542.9 + 2325	medium compact	94	2.9	VD	41
1543.0 + 2447	medium compact	83	1.0	ED	19
1543.4 + 2247	compact	67	0.7	ED	40
1543.9 + 2215	compact	73	0.9	ED	3
1544.4 + 2543	medium compact	240	11.2	Near	13
1544.7 + 2610	compact	93	1.7	VD	17
1544.9 + 2549	medium compact	87	0.9	ED	18
1545.1 + 2104	compact	85	0.8	ED	2
1547.6 + 2555	compact	65	0.6	ED	16
1547.7 + 2219	medium compact	66	0.8	ED	44
1548.4 + 2615	medium compact	80	0.9	ED	15
1548.5 + 2109	medium compact	95	1.0	ED	43
1548.6 + 2136	open	182	11.3	Near	30
1549.2 + 2635	open	80	1.9	VD	14
1549.6 + 2417	open	157	8.7	Near	11
1550.5 + 2310	medium compact	104	3.6	D	29
1551.2 + 2436	medium compact	94	2.1	VD	12
1551.8 + 2625	medium compact	101	1.6	VD	10
1552.6 + 2355	medium compact	106	2.9	D	9
1552.9 + 2419	medium compact	107	1.1	ED	7
1553.3 + 2518	medium compact	73	1.0	ED	8
1600.4 + 1925	medium compact	2859	33.8	Near	1*

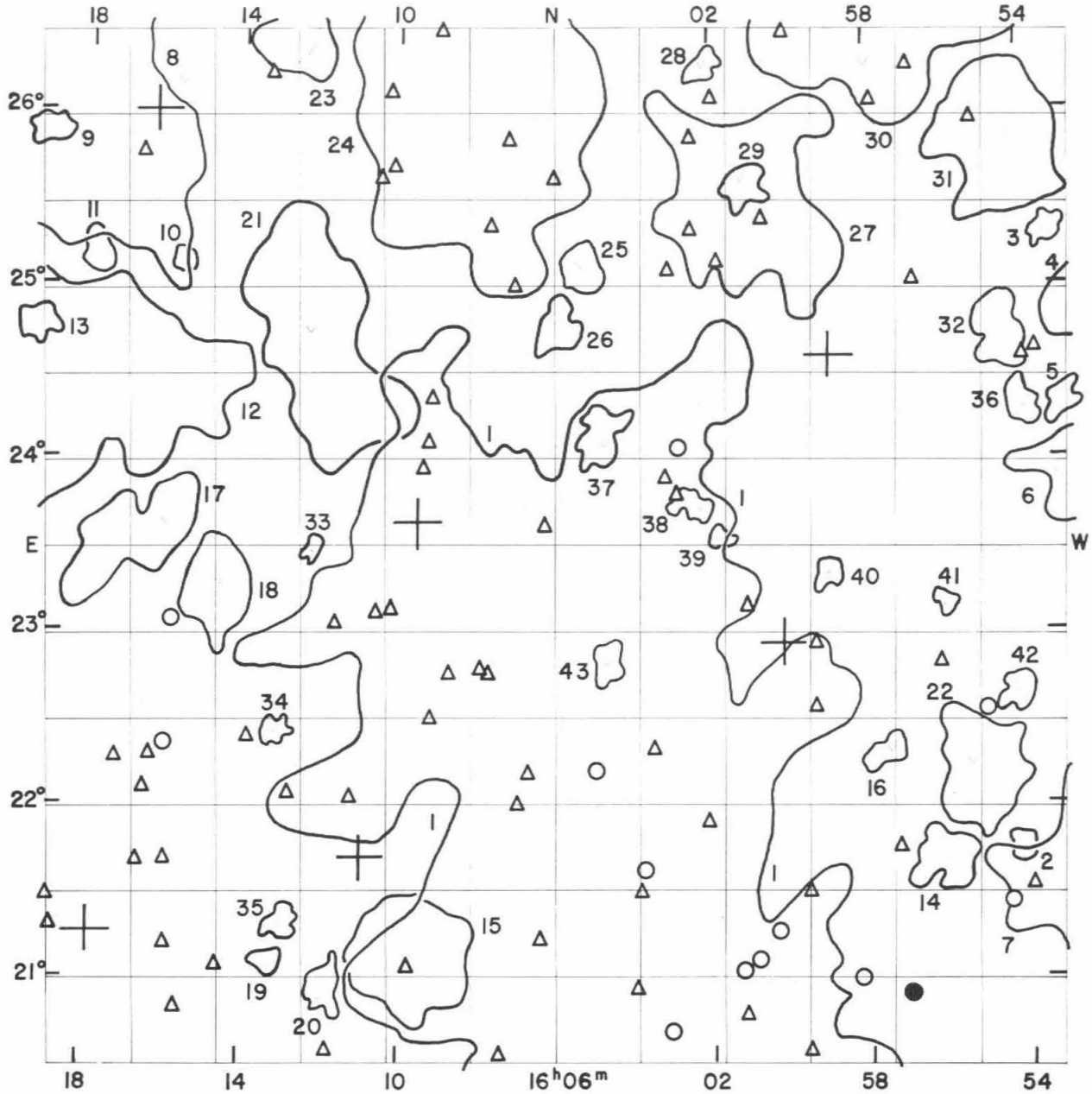
Average number of galaxies per cluster = 176.7

*Cluster No. 1 contains the conventional Hercules Cluster as one of its condensations.

GALAXIES

Position α 1950 δ		NGC IC*	m_p	V_s km/sec	Remarks
h m	o '				
15 26.6	+ 25 55		15.7		
15 26.9	+ 25 38		15.1		
15 27.1	+ 20 55		15.3		
15 27.3	+ 26 10		15.4		
15 27.9	+ 23 48	1124*	14.5		
15 29.5	+ 25 24		15.3		double system
15 29.9	+ 25 44		15.6		
15 30.3	+ 25 39		15.7		
15 30.6	+ 23 20		15.4		very compact
15 30.8	+ 25 44		15.7		
15 31.4	+ 21 39		15.6		
15 31.5	+ 24 34		15.3		compact
15 31.6	+ 21 11		15.2		
15 31.6	+ 26 18		15.3		
15 31.7	+ 21 19		14.9		
15 31.9	+ 23 05		14.6		
15 32.8	+ 23 40	4553*+4554*	14.4		double nucleus
15 32.8	+ 24 17		15.6		compact
15 33.0	+ 24 15		15.7		
15 33.1	+ 21 00		15.2		
15 33.2	+ 25 28	4556*	14.8		
15 33.4	+ 21 40		15.7		
15 33.5	+ 26 30		15.6		double nebula
15 33.6	+ 25 30	4558*	15.6		
15 33.7	+ 25 20		15.6		
15 33.7	+ 25 30	4559*	15.1		very compact
15 33.9	+ 25 34		15.7		
15 34.2	+ 22 40		14.9		
15 34.4	+ 25 18		15.4		
15 34.6	+ 25 35	4561*	15.2		double system
15 34.9	+ 25 43		15.4		
15 35.2	+ 20 43		14.7		
15 35.2	+ 21 55		15.3		very compact
15 35.6	+ 22 35		14.6		
15 35.9	+ 26 25		15.5		
15 35.9	+ 26 26		15.2		compact
15 36.4	+ 26 22		15.6		diffuse
15 36.7	+ 21 54		15.7		
15 36.8	+ 23 57		15.5		
15 37.1	+ 24 37		15.1		
15 37.2	+ 21 55		15.6		
15 37.3	+ 25 06		15.1		double system
15 37.4	+ 23 22		15.7		diffuse
15 37.5	+ 21 57		15.0		
15 37.5	+ 25 54		15.4		
15 37.8	+ 21 38	5975	14.7		
15 37.8	+ 21 59		15.5		double system
15 37.8	+ 22 02		15.5		compact
15 37.9	+ 20 51	1132*	14.4		
15 38.0	+ 21 41		15.2		
15 38.4	+ 24 43		15.6		
15 38.5	+ 20 44		15.3		
15 38.6	+ 21 28		15.7		
15 39.1	+ 22 11		15.6		
15 39.5	+ 25 16		15.7		
15 39.6	+ 23 22		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 40.0 +23 58	4573*	15.6		
15 40.1 +23 59	4575*	15.5		
15 40.4 +23 50	4576*	14.8		
15 40.5 +23 02		15.3		
15 40.6 +23 57	4577*	15.4		compact
15 40.6 +25 08		15.1		
15 40.7 +23 56	4579*	15.5		
15 41.4 +22 55		15.1		double nebula
15 42.2 +25 29		14.7		
15 42.7 +23 01		15.5		double system
15 43.1 +24 47	5991	14.7		
15 43.2 +24 40		15.3		
15 43.2 +25 36		15.4		
15 43.6 +20 44		14.5		large, very diffuse spiral
15 43.6 +23 02		15.5		
15 44.0 +21 14		15.4		
15 44.1 +22 32		15.6		
15 44.2 +23 58	4583*	15.1		
15 44.7 +22 19		15.7		extremely compact
15 45.0 +23 03		15.7		
15 45.1 +21 42		15.5		
15 45.3 +21 53		15.2		
15 45.5 +26 13		14.9		
15 45.8 +25 53		15.7		
15 46.0 +21 12		15.2		
15 46.1 +26 21	1138*	15.3		
15 46.3 +23 08		15.7		
15 46.5 +22 02		15.4		
15 46.5 +25 33		15.2		
15 47.0 +21 51		15.7		
15 47.1 +21 59		15.1		multiple system
15 47.2 +21 13		15.1		
15 47.3 +20 49		15.7		
15 47.8 +20 58		14.4		double system
15 47.9 +24 57		15.0		
15 48.0 +25 13		15.3		
15 48.4 +20 33		14.9		double system
15 48.6 +22 24		15.7		diffuse
15 48.8 +23 10		15.5		
15 48.9 +24 07		15.5		
15 49.0 +22 06		15.2		
15 49.1 +25 51		15.0		
15 49.2 +21 07		15.6		diffuse spiral
15 49.3 +24 35		15.4		
15 49.4 +23 57		15.4		
15 49.7 +26 08		15.3		
15 49.8 +23 54		15.7		
15 49.8 +24 29		15.5		
15 50.1 +23 30		15.4		
15 50.1 +24 46		14.7		
15 50.2 +22 34		15.7		
15 50.5 +21 56		15.5		double system
15 50.6 +24 32		15.2		
15 50.7 +21 16	6008	14.2		
15 50.8 +20 48		15.4		
15 50.9 +21 15		15.0		
15 51.3 +23 44		15.7		
15 51.9 +23 17		14.8		
15 52.7 +21 17		15.4		



FIELD No. 137

16^h06^m $+23^\circ30'$

Survey Plate No. 113

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
21524	15 58 54.8	+ 24 35 29	8.71
21552	16 00 08.4	+ 22 56 31	4.82
21786	16 09 30.2	+ 23 37 22	5.96
21820	16 10 58.0	+ 21 41 32	6.58
21937	16 16 19.2	+ 26 01 02	6.63
21976	16 17 54.1	+ 21 15 07	6.14

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1548.6 + 2136	open	182	11.3	Near	7
1549.6 + 2417	open	157	8.7	Near	4
1552.6 + 2355	medium compact	106	2.9	D	6
1552.9 + 2419	medium compact	107	1.1	ED	5
1553.3 + 2518	medium compact	73	1.0	ED	3
1554.0 + 2418	compact	111	1.2	ED	36
1554.1 + 2145	compact	70	0.8	ED	2
1554.2 + 2239	medium compact	84	1.2	ED	42
1554.4 + 2551	medium compact	130	4.4	MD	31
1554.5 + 2444	compact	220	1.9	ED	32
1555.1 + 2212	open	100	3.3	D	22
1556.0 + 2310	compact	54	0.7	ED	41
1556.1 + 2141	medium compact	77	2.0	VD	14
1556.8 + 2641	open	298	7.1	MD	30
1557.6 + 2218	compact	135	1.1	ED	16
1559.0 + 2320	compact	70	0.8	ED	40
1600.4 + 1925	medium compact	2859	33.8	Near	1*
1600.9 + 2528	medium compact	246	5.8	Near	27
1601.1 + 2534	medium compact	137	1.3	ED	29
1601.7 + 2331	compact	58	0.6	ED	39
1602.1 + 2615	compact	90	0.9	ED	28
1602.5 + 2344	medium compact	99	1.1	ED	38
1604.6 + 2250	medium compact	71	1.1	ED	43
1604.8 + 2407	medium compact	86	1.6	VD	37
1605.3 + 2505	medium compact	171	1.4	ED	25
1605.9 + 2445	medium compact	158	1.5	ED	26
1608.5 + 3044	medium compact	1775	31.8	Near	24
1609.6 + 2107	medium compact	126	3.8	MD	15
1611.8 + 2056	medium compact	102	1.4	VD	20
1612.0 + 2438	open	122	5.7	D	21
1612.2 + 2328	compact	59	0.6	ED	33
1612.7 + 2624	medium compact	77	2.3	VD	23
1612.9 + 2120	compact	76	1.0	ED	35
1613.1 + 2225	compact	62	0.8	ED	34
1613.3 + 2105	compact	88	0.9	ED	19
1614.6 + 2315	medium compact	103	2.6	D	18
1615.6 + 2508	medium compact	60	0.7	ED	10
1616.8 + 2331	open	97	3.3	D	17
1617.8 + 2511	medium compact	84	1.2	VD	11
1619.0 + 2420	compact	360	8.9	Near	12
1619.1 + 2554	compact	154	1.1	ED	9
1619.3 + 2445	medium compact	67	1.1	VD	13
1619.9 + 2558	medium compact	479	10.0	MD	8

Average number of galaxies per cluster = 228.8

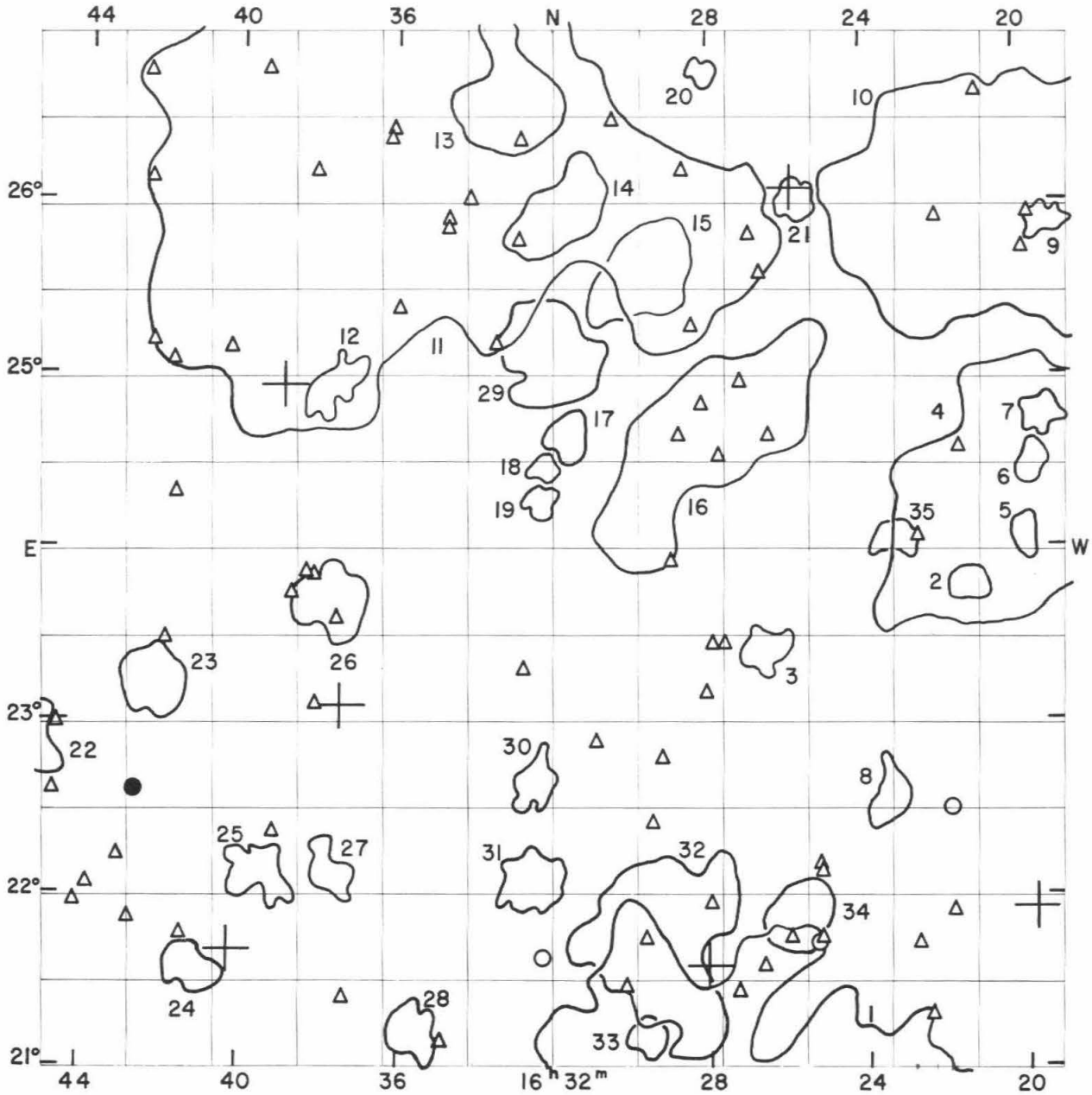
*Cluster No. 1 contains the conventional Hercules Cluster as one of its condensations.

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 53.6 +24 38		15.5		double system
15 53.9 +21 32		15.6		
15 54.0 +24 35		15.4		
15 54.4 +21 27		14.7		
15 55.0 +22 33	6020	14.5		
15 55.1 +25 58		15.3		
15 56.1 +22 49		15.7		
15 56.7 +25 02		15.6		
15 56.8 +26 16		15.5		
15 57.0 +20 55	6027	13.4	+ 4237	Seyfert's Group *)
15 57.2 +21 45		15.4		
15 57.8 +26 05	4587*	15.5		very compact
15 58.2 +21 00		14.2		
15 59.3 +22 34		15.1		
15 59.3 +22 56		15.6		
15 59.5 +20 34		15.4		compact
15 59.5 +21 30		15.2		
16 00.0 +26 28	1166*	15.3		double system
16 00.3 +21 16		14.8		
16 00.6 +25 23		15.5		
16 00.8 +21 06	6032	15.0		
16 01.1 +20 47		15.2		
16 01.1 +23 09		15.7		
16 01.2 +21 02	6035	14.7		
16 01.8 +25 13		15.2		
16 01.9 +26 05		15.4		
16 02.1 +21 55		15.7		
16 02.4 +25 19		15.4		
16 02.5 +25 51		15.7		
16 02.8 +24 04	6051	14.9		
16 02.9 +23 48		15.7		diffuse double system
16 03.0 +20 41	6052	14.1		double system, contact
16 03.1 +25 05		15.4		
16 03.2 +23 54		15.7		
16 03.4 +22 20		15.7		
16 03.7 +21 38	6060	14.3		
16 03.8 +21 30		15.4		compact
16 03.9 +20 55		15.2		diffuse double system
16 04.9 +22 12		15.0		
16 06.0 +25 36		15.7		
16 06.2 +23 37		15.3		double system
16 06.4 +21 13		15.5		
16 06.6 +22 11		15.5		
16 06.9 +22 00		15.6		
16 07.0 +25 00		15.5		
16 07.2 +25 50		15.2		
16 07.4 +20 33		15.6		diffuse
16 07.6 +25 20		15.6		double system
16 07.7 +22 45		15.7		
16 07.9 +22 47		15.6		
16 08.7 +22 45		15.6		
16 08.9 +26 28		15.7		extremely diffuse
16 09.0 +24 20		15.4		
16 09.2 +22 30		15.5		compact
16 09.2 +24 05	6075	15.3		
16 09.3 +23 56		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 09.8 + 21 03		15.4		
16 10.1 + 23 08		15.6		
16 10.1 + 25 41		15.7		diffuse
16 10.2 + 26 07		15.6		diffuse
16 10.4 + 25 37		15.5		
16 10.5 + 23 07		15.7		
16 11.2 + 22 02		15.4		
16 11.6 + 23 03		15.5		
16 11.8 + 20 35		15.6		
16 12.8 + 22 04		15.3		
16 13.4 + 26 14		15.1		
16 13.8 + 22 24		15.7		
16 14.6 + 21 04		15.7		
16 15.5 + 20 49		15.6		diffuse
16 15.7 + 23 04		15.0		
16 15.9 + 21 12		15.4		
16 15.9 + 21 41		15.5		multiple system
16 15.9 + 22 20		14.9		
16 16.3 + 22 17		15.7		
16 16.4 + 22 05		15.3		very compact
16 16.6 + 21 40		15.5		
16 16.6 + 25 46		15.5		
16 17.2 + 22 16		15.6		
16 18.8 + 21 17		15.4		
16 18.9 + 21 28		15.5		

*) Seyfert's group consists of six galaxies of magnitudes 14.7 15.1 15.3 15.6 16.0 16.5, integrated $m_p = 13.4$.



FIELD No. 138

16^h32^m $+24^o00'$

Survey Plate No. 1438

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
22011	16 19 42.6	+ 21 55 43	7.10
22145	16 25 50.9	+ 26 05 38	6.68
22193	16 28 04.1	+ 21 35 50	2.81
22415	16 37 29.1	+ 23 05 56	7.00
22452	16 38 56.1	+ 24 57 14	6.22
22476	16 40 17.4	+ 21 41 10	7.3

CLUSTERS OF GALAXIES

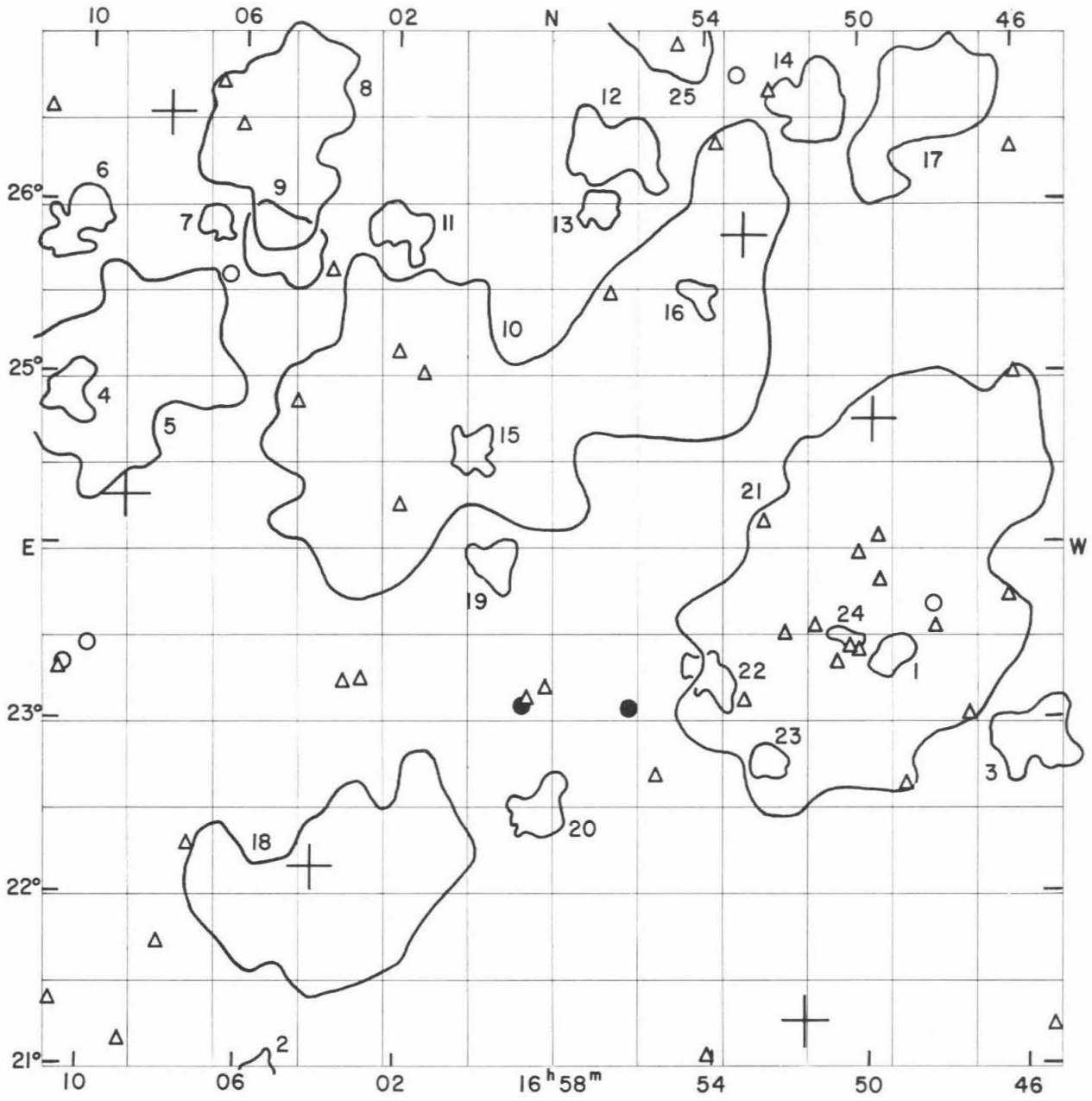
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1619.0 + 2420	compact	360	8.9	Near	4
1619.1 + 2554	compact	154	1.1	ED	9
1619.3 + 2445	medium compact	67	1.1	VD	7
1619.7 + 2429	compact	111	1.0	ED	6
1619.9 + 2403	open	56	1.0	ED	5
1619.9 + 2558	medium compact	479	10.0	MD	10
1621.3 + 2347	compact	84	1.2	ED	2
1623.2 + 2404	medium compact	71	1.2	VD	35
1623.4 + 2235	compact	52	1.4	VD	8
1625.6 + 2600	compact	106	1.3	ED	21
1625.8 + 2153	compact	144	2.1	VD	34
1626.2 + 2045	open	324	11.0	Near	1
1626.6 + 2325	medium compact	106	1.4	ED	3
1628.0 + 2438	medium compact	111	5.7	Near	16
1628.1 + 2644	compact	77	0.8	ED	20
1629.1 + 2140	medium compact	182	5.2	D	32
1629.6 + 2111	compact	81	1.2	ED	33
1629.6 + 2535	medium compact	77	3.0	MD	15
1631.6 + 2439	compact	175	1.4	VD	17
1631.8 + 2556	medium compact	114	2.6	MD	14
1632.0 + 2508	open	82	3.3	D	29
1632.2 + 2428	medium compact	72	0.8	ED	18
1632.3 + 2416	compact	89	1.0	ED	19
1632.5 + 2205	compact	138	2.0	VD	31
1632.5 + 2240	medium compact	98	1.4	ED	30
1633.2 + 2641	medium compact	126	3.6	MD	13
1635.5 + 2113	medium compact	121	1.7	VD	28
1635.5 + 2608	open	390	15.8	Near	11
1637.6 + 2208	open	85	1.4	VD	27
1637.6 + 2341	medium compact	287	2.2	ED	26
1637.6 + 2455	medium compact	92	1.6	ED	12
1639.5 + 2207	compact	98	1.7	VD	25
1641.0 + 2135	compact	133	1.6	VD	24
1642.1 + 2314	compact	119	2.0	VD	23
1645.7 + 2254	medium compact	102	2.3	D	22

Average number of galaxies per cluster = 141.8

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
16 19.7 + 25 56		15.7		
16 19.9 + 25 44		15.7		diffuse
16 21.0 + 26 39		15.5		
16 21.6 + 24 35		15.4		
16 21.8 + 21 55		15.5		
16 21.8 + 22 30		15.0		
16 22.1 + 25 55		15.6		very diffuse
16 22.4 + 21 19		15.6		
16 22.6 + 24 04		15.7		
16 22.7 + 21 44		15.7		
16 25.1 + 21 45		15.5		compact
16 25.1 + 22 08		15.7		very diffuse
16 25.1 + 22 10		15.6		
16 25.2 + 21 43		15.0		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 25.9 +21 46		15.6		
16 26.5 +24 40		15.7		diffuse with jet
16 26.6 +21 36		15.3		compact
16 26.7 +25 35		15.4		double system
16 27.0 +25 49		15.3		
16 27.2 +24 58		15.6		
16 27.3 +21 27		15.2		
16 27.6 +23 27		15.7		
16 27.8 +24 32		15.5		with jet
16 27.9 +23 27		15.6		very compact
16 28.0 +21 58		15.4		
16 28.1 +23 10		15.6		
16 28.2 +24 50		15.4		
16 28.4 +25 17		15.5		
16 28.7 +26 11		15.6		
16 28.8 +24 40		15.7		extremely compact
16 29.0 +23 56		15.5		
16 29.2 +22 48		15.3		
16 29.5 +22 25		15.2		
16 29.6 +21 45		15.5		
16 30.1 +21 29		15.4		diffuse
16 30.5 +26 28		15.7		
16 30.9 +22 54	4609*	15.4		
16 32.2 +21 39	6186	14.2		
16 32.8 +23 19		15.4		
16 32.9 +25 46		15.6		
16 32.9 +26 21		15.6		
16 33.5 +25 11		15.6		double system
16 34.1 +26 01		15.6		compact
16 34.7 +25 51		15.7		
16 34.7 +25 54		15.7		double system
16 34.8 +21 10		15.5		compact
16 36.0 +25 23		15.5		
16 36.1 +26 25		15.7		
16 36.2 +26 22		15.6		
16 37.3 +21 25		15.1		
16 37.5 +23 36		15.6		
16 38.1 +23 07		15.4		diffuse spiral
16 38.1 +23 51	6201	15.5		
16 38.1 +26 11		15.5		
16 38.3 +23 52	6203	15.3		
16 38.8 +23 45		15.4		
16 39.1 +22 22		15.6		
16 39.4 +26 47		15.7		
16 40.3 +25 10		15.4		
16 41.4 +21 47		15.6		
16 41.6 +24 19		15.7		
16 41.8 +25 05		15.5		
16 41.9 +23 29		15.7		diffuse
16 42.3 +25 13		15.5		
16 42.4 +26 09		15.7		diffuse
16 42.5 +26 45		15.5		
16 42.6 +22 37		13.5		
16 42.7 +21 52		15.7		
16 43.0 +22 14		15.7		diffuse
16 43.9 +22 04		15.6		
16 44.1 +21 58		15.7		
16 44.7 +22 59		15.6		compact
16 44.8 +22 36		15.6		extremely compact



FIELD No. 139

16^h58^m $+24^\circ00'$

Survey Plate No. 1377

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
22708	16 49 40.8	+ 24 44 21	5.20
22774	16 51 36.9	+ 21 15 11	7.4
22810	16 52 59.2	+ 25 48 36	6.33
23089	17 04 11.0	+ 22 09 01	5.72
23171	17 07 55.5	+ 26 31 00	7.00
23191	17 08 58.8	+ 24 17 51	6.19

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1645.7 + 2254	medium compact	102	2.3	D	3
1648.3 + 2632	open	96	4.1	MD	17
1649.3 + 2322	medium compact	55	1.2	VD	1
1649.9 + 2343	medium compact	310	11.5	Near	21
1650.4 + 2328	compact	55	0.8	ED	24
1651.1 + 2634	compact	68	2.0	D	14
1652.5 + 2245	compact	59	1.1	VD	23
1653.9 + 2315	medium compact	119	1.5	VD	22
1654.1 + 2527	compact	56	1.1	VD	16
1656.3 + 2619	medium compact	79	2.6	D	12
1656.8 + 2558	compact	112	1.2	ED	13
1658.2 + 2229	medium compact	86	1.7	VD	20
1658.5 + 2459	medium compact	244	11.6	Near	10
1659.4 + 2354	compact	74	1.5	VD	19
1700.0 + 2433	compact	63	1.4	VD	15
1701.4 + 2830	open	340	16.2	Near	25
1701.9 + 2555	medium compact	77	1.8	VD	11
1703.5 + 2200	open	91	7.1	Near	18
1705.0 + 2545	medium compact	74	2.3	D	9
1705.2 + 2624	medium compact	96	5.3	MD	8
1705.3 + 2055	medium compact	88	1.2	ED	2
1706.6 + 2554	compact	69	1.0	ED	7
1709.1 + 2459	open	112	6.4	MD	5
1710.4 + 2552	medium compact	87	1.9	VD	6
1710.5 + 2453	compact	58	1.7	VD	4

Average number of galaxies per cluster = 106.8

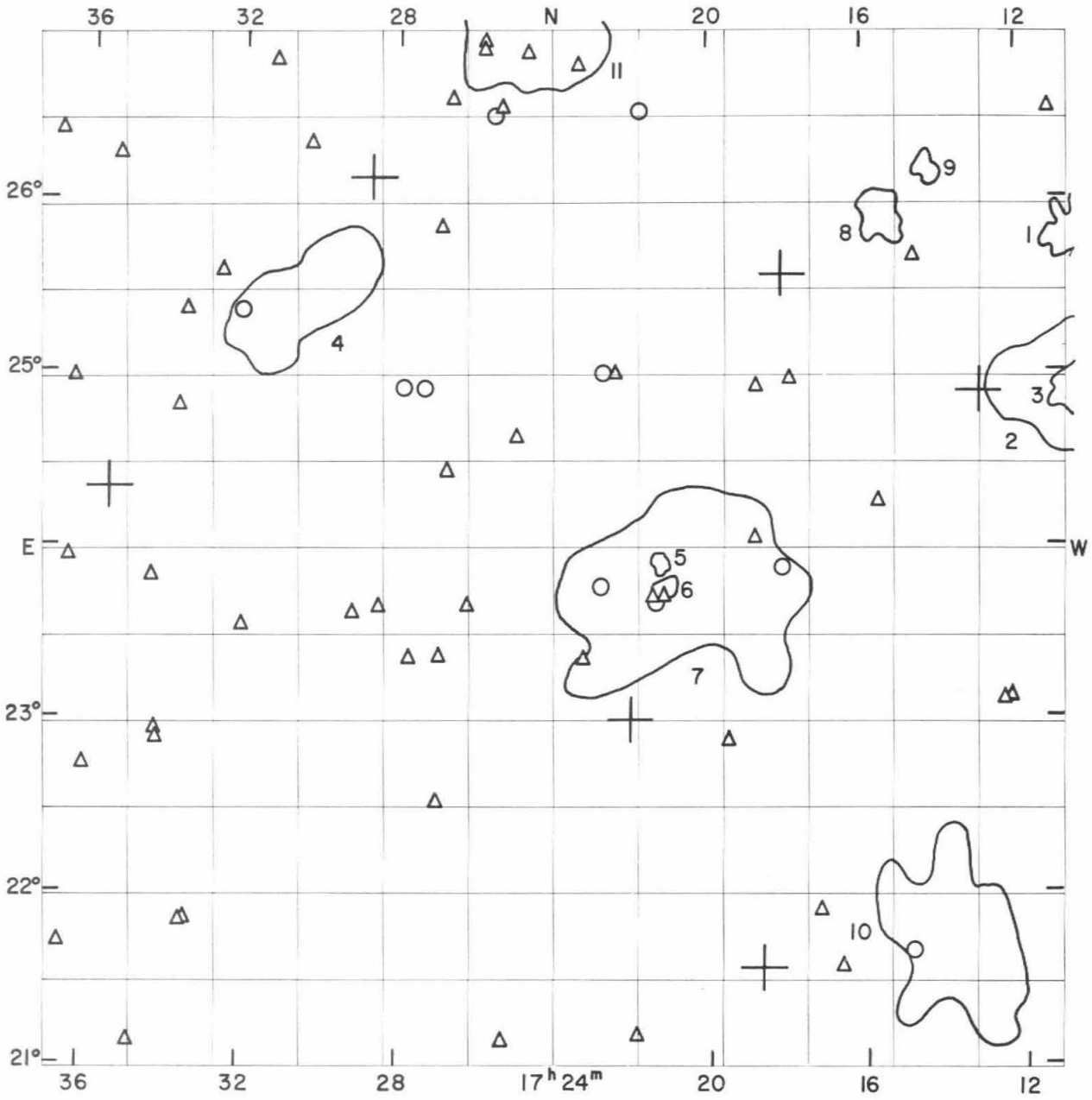
GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
16 45.3	+ 21 13		15.7		disrupted system
16 46.0	+ 25 00		15.7		
16 46.0	+ 26 18	6228	15.3		
16 46.3	+ 23 42		15.7		
16 47.3	+ 23 01		15.6		
16 48.1	+ 23 31		15.6		
16 48.1	+ 23 40	6233	14.9		
16 49.0	+ 22 37	4623*	15.4		double system
16 49.5	+ 23 48		15.7		
16 49.5	+ 24 03		15.4		
16 50.1	+ 23 23		15.7		
16 50.1	+ 23 57		15.5		compact
16 50.3	+ 23 25	6243	15.1		
16 50.6	+ 23 20		15.4		compact
16 51.2	+ 23 32		15.6		
16 52.0	+ 23 30		15.7		
16 52.3	+ 26 38		15.7		
16 52.5	+ 24 08		15.5		compact
16 53.0	+ 23 06		15.7		
16 53.1	+ 26 44	4630*	14.8		system with two jets
16 53.7	+ 26 20		15.6		
16 54.1	+ 21 04		15.7		diffuse spiral
16 54.6	+ 26 55		15.5		very compact

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
16 55.4	+ 22 40		15.3		
16 56.0	+ 23 03	6267	14.0		
16 56.4	+ 25 27		15.7		compact
16 58.1	+ 23 11		15.3		
16 58.6	+ 23 07	6277	15.2		
16 58.7	+ 23 05	6278	13.8		
17 01.2	+ 25 00		15.1		
17 01.9	+ 24 15		15.1		double system
17 01.9	+ 25 07		15.4		
17 02.8	+ 23 15		15.2		double system
17 03.3	+ 23 14		15.4		
17 03.6	+ 25 36		15.6		
17 04.5	+ 24 50		15.4		system with jet
17 06.0	+ 26 26		15.5		
17 06.3	+ 25 35		14.2		
17 06.5	+ 26 41		15.3		
17 07.2	+ 22 17		15.6		
17 07.9	+ 21 43		15.5		
17 08.9	+ 21 09		15.7		
17 09.8	+ 23 26	6308	14.4		
17 10.5	+ 23 20	6314	14.3	+ 6748	
17 10.6	+ 23 17	6315	15.4		
17 10.8	+ 21 22		15.4		
17 11.1	+ 26 32		15.6		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6314	-	-	14.10	Sa	14.0	Sa	-	-



FIELD No. 140

17^h24^m $+24^o00$

Survey Plate No. 263

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
23294	17 12 58.6	+ 24 53 48	3.16
23427	17 18 07.5	+ 25 35 13	5.32
23441	17 18 38.7	+ 21 34 05	6.95
23546	17 22 00.9	+ 23 00 19	5.70
23726	17 28 43.0	+ 26 08 49	4.48
23901	17 35 27.4	+ 24 20 18	5.67

CLUSTERS OF GALAXIES

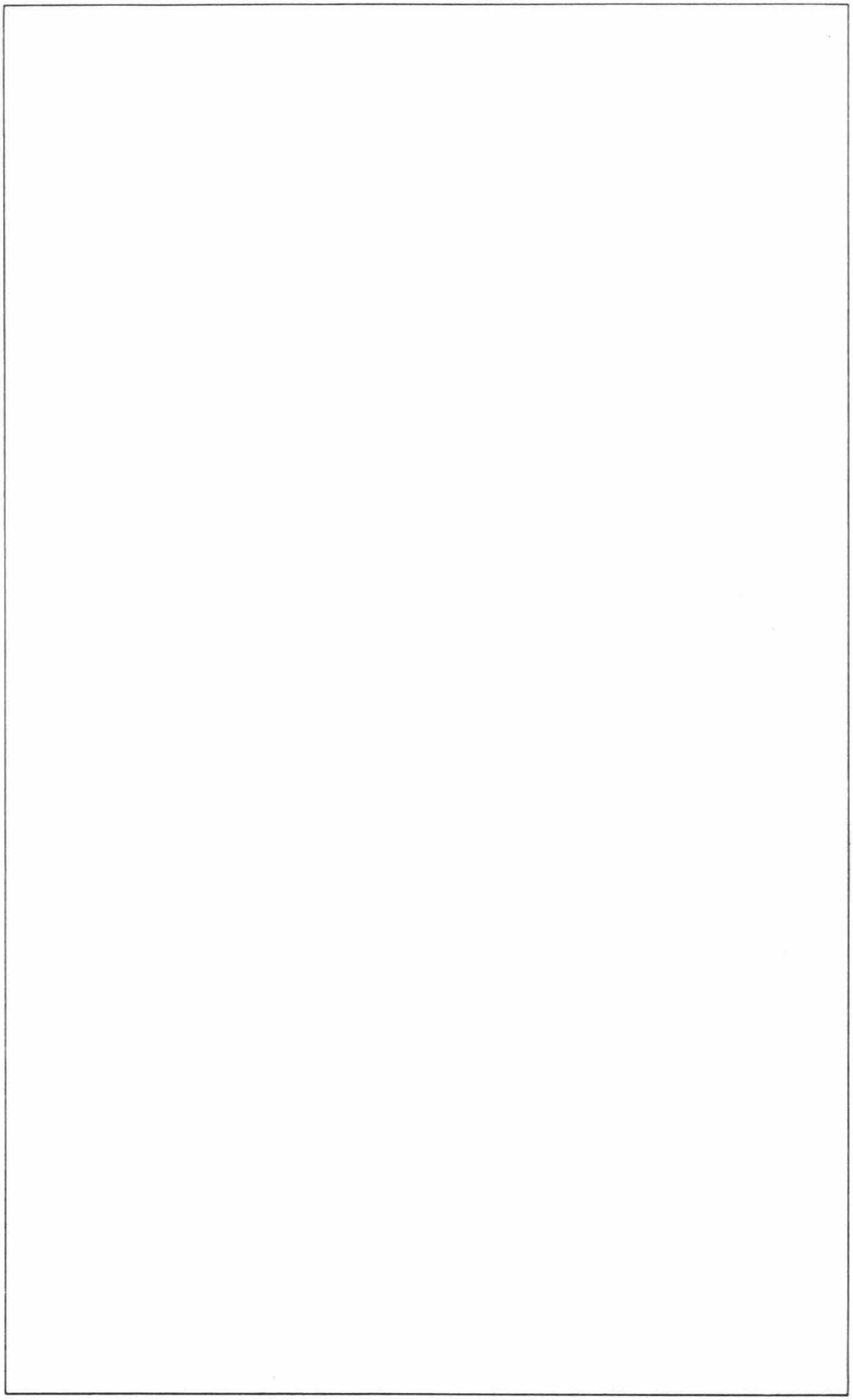
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1709.1 + 2459	open	112	6.4	MD	2
1710.4 + 2552	medium compact	87	1.9	VD	1
1710.5 + 2453	compact	58	1.7	VD	3
1713.8 + 2144	medium compact	90	5.0	MD	10
1714.3 + 2611	compact	49	0.8	ED	9
1715.5 + 2555	compact	98	1.4	VD	8
1720.5 + 2345	open	75	6.9	MD	7
1721.2 + 2345	compact	61	0.8	VD	6
1721.2 + 2354	compact	53	0.6	ED	5
1724.6 + 2703	open	88	4.9	MD	11
1730.5 + 2526	medium compact	107	3.8	D	4

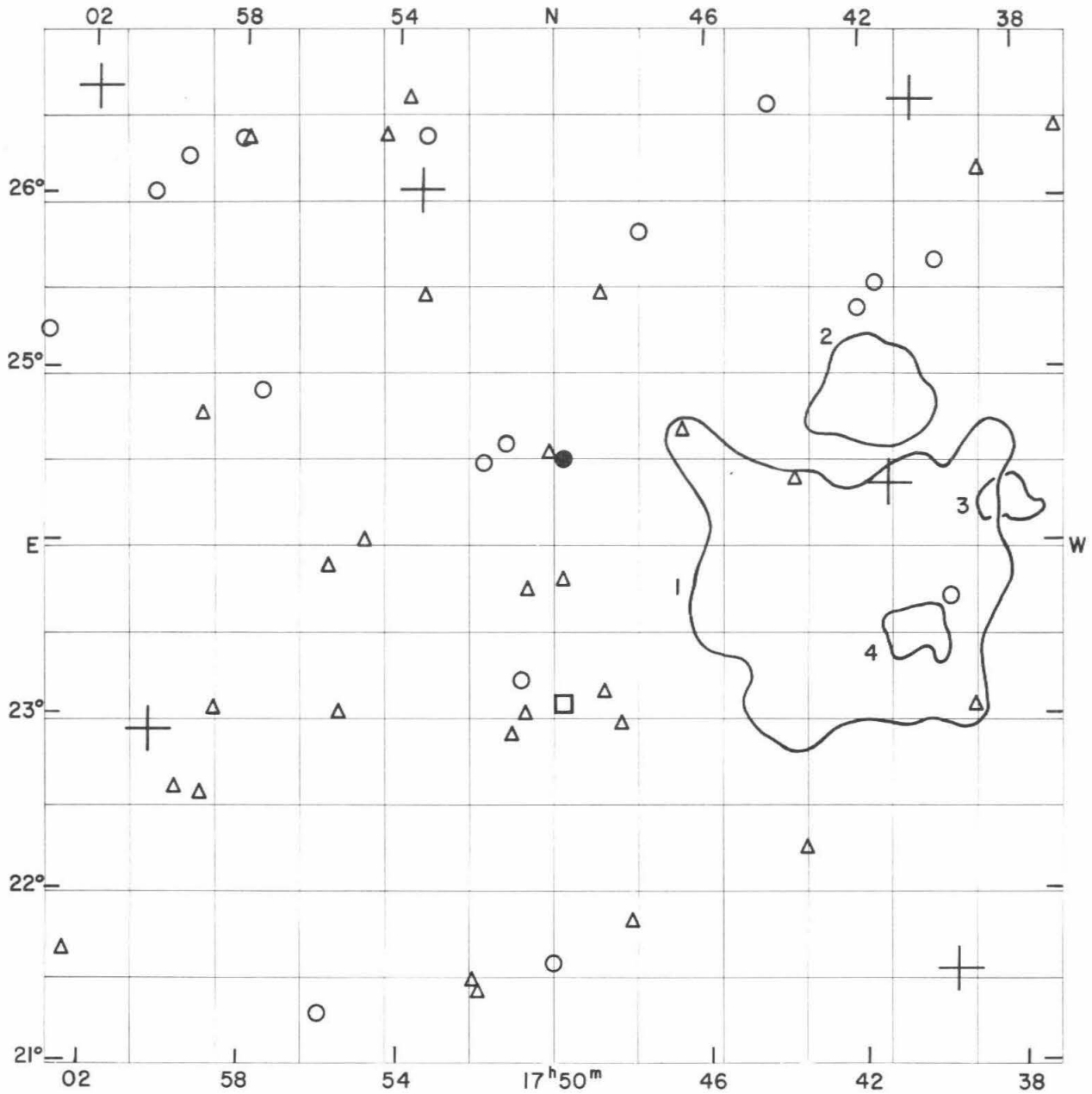
Average number of galaxies per cluster = 79.8

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
17 11.1 + 26 32		15.6		
17 12.3 + 23 07		15.5		
17 12.4 + 23 06		15.1		
17 14.6 + 25 40		15.7		
17 14.8 + 21 40		14.6		double system
17 15.6 + 24 15		15.6		
17 16.6 + 21 35		15.4		
17 17.1 + 21 55		15.7		
17 17.8 + 24 58		15.7		double system
17 18.0 + 23 53		14.5		
17 18.7 + 24 56		15.4		
17 18.8 + 24 03		15.6		
17 19.5 + 22 53		15.7		diffuse B-spiral
17 21.1 + 23 43		15.3		
17 21.3 + 23 41		14.9		double nebula
17 21.4 + 23 43		15.5		compact
17 21.8 + 26 31	1256*	14.5		
17 21.9 + 21 11		15.6		
17 22.3 + 25 00		15.2		
17 22.6 + 25 00		15.0		
17 22.7 + 23 47		14.9		
17 23.2 + 23 21		15.3		
17 23.3 + 26 47		15.6		
17 24.6 + 26 52		15.7		
17 24.9 + 24 38		15.7		diffuse spiral
17 25.2 + 21 10		15.3		
17 25.2 + 26 32	6371	15.2		
17 25.5 + 26 30	6372	14.1		
17 25.7 + 26 53		15.4		
17 25.7 + 26 55		15.5		double system, bridge
17 26.2 + 23 40		15.7		double nebula, collision
17 26.5 + 26 35		15.4		
17 26.7 + 24 26		15.7		
17 26.8 + 25 51		15.6		
17 26.9 + 23 23		15.7		
17 27.0 + 22 32		15.5		double nebula, contact
17 27.2 + 24 55		14.8		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
17 27.7 + 23 22		15.4		ring structure
17 27.8 + 24 55		14.7		
17 28.4 + 23 40		15.3		
17 29.1 + 23 37		15.4		
17 30.3 + 26 20		15.7		
17 31.2 + 26 50		15.6		
17 32.0 + 23 33		15.5		
17 32.0 + 25 22		14.6		
17 32.5 + 25 36		15.5		
17 33.3 + 21 51		15.7		
17 33.4 + 25 22		15.3		
17 33.5 + 21 50		15.6		
17 33.6 + 24 49		15.4		
17 34.1 + 22 54		15.6		
17 34.1 + 22 56		15.5		
17 34.3 + 23 50		15.5		
17 34.7 + 21 09		15.3		
17 35.2 + 26 16		15.2		
17 36.0 + 22 44		15.3		double nebula
17 36.3 + 24 59		15.1		
17 36.5 + 21 43		15.2		
17 36.5 + 23 57		15.5		
17 36.8 + 26 25		15.6		





FIELD No. 141

17^h50^m $+24^\circ00'$

Survey Plate No. 260

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	° ' "	
24005	17 39 40.1	+ 21 31 35	6.74
24037	17 40 37.8	+ 26 34 26	8.0
24059	17 41 18.3	+ 24 20 53	5.72
24382	17 53 24.0	+ 26 03 24	5.48
24568	18 00 24.6	+ 22 55 17	6.12
24609	18 01 53.8	+ 26 38 54	7.00

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1738.2 + 2415	medium compact	60	1.6	D	3
1740.5 + 2330	compact	65	1.9	D	4
1741.6 + 2453	compact	119	3.5	D	2
1742.2 + 2345	medium compact	93	10.0	Near	1

Average number of galaxies per cluster = 84.3

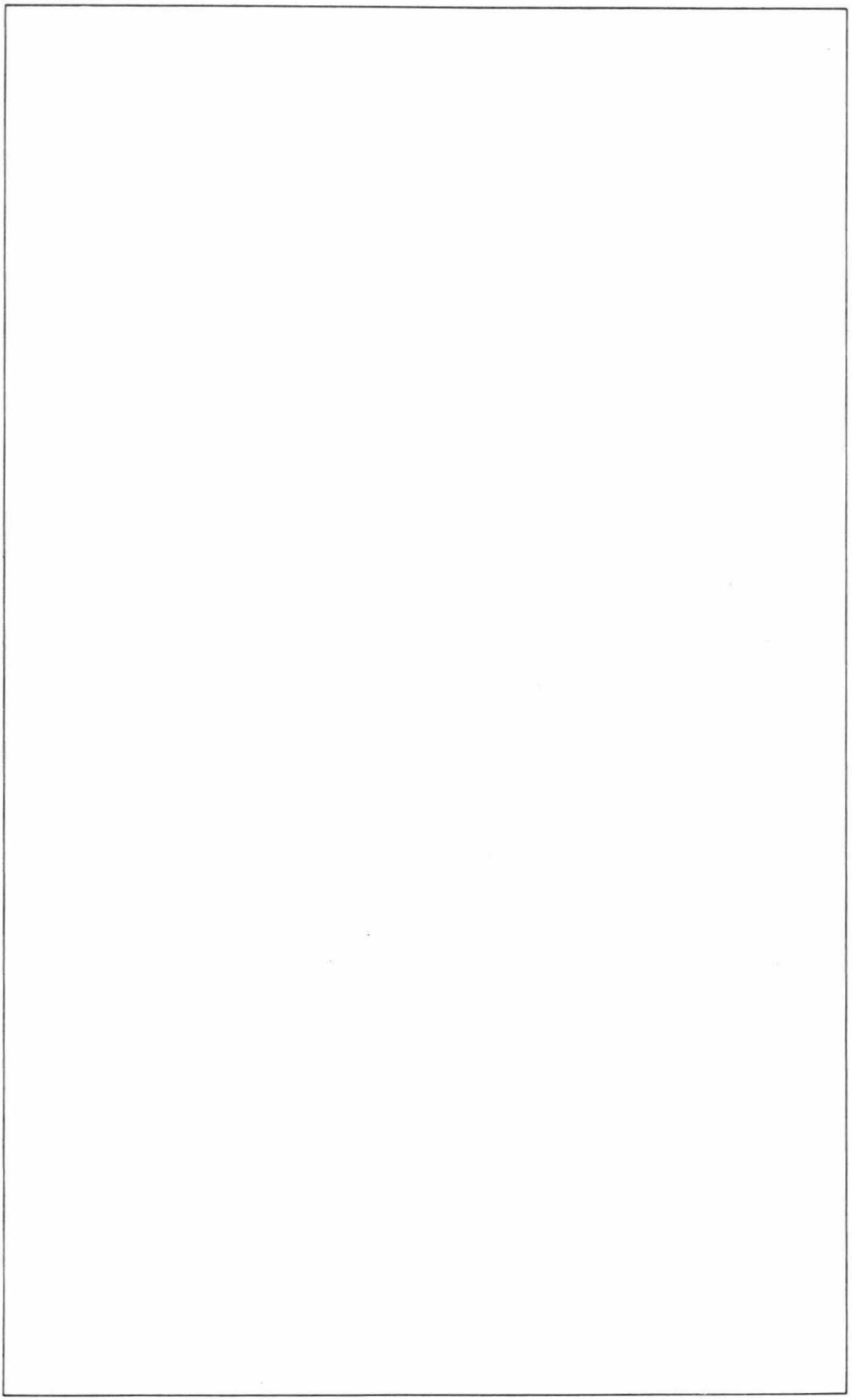
GALAXIES

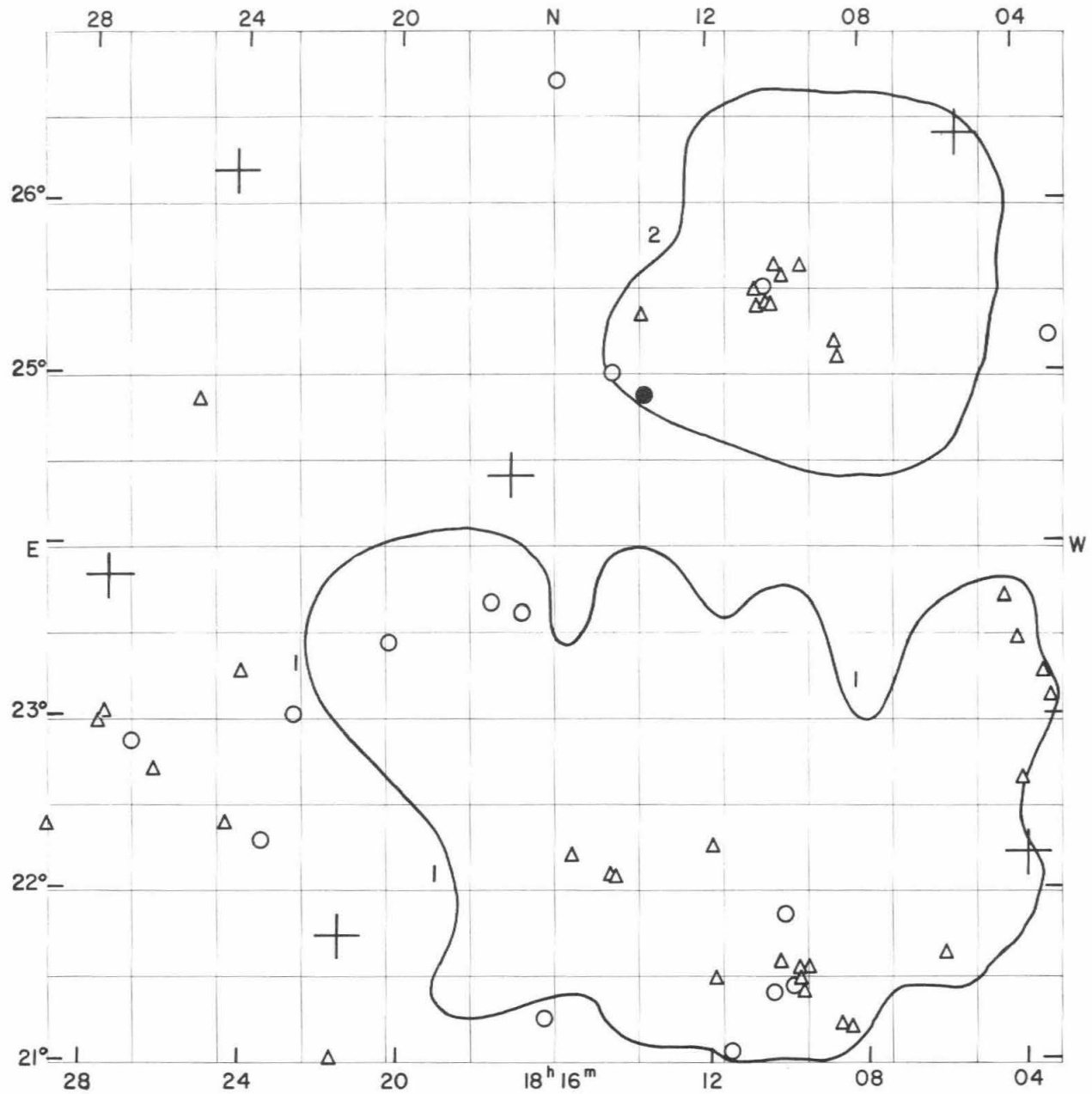
Position α 1950 δ h m o ′	NGC IC*	m_p	V_s km/sec	Remarks
17 36.8 + 26 25		15.6		
17 38.9 + 26 10		15.6		compact
17 39.1 + 23 04		15.5		
17 39.7 + 23 42	6417	14.4		
17 40.0 + 25 39		14.8		
17 41.6 + 25 31	6427	14.6		
17 42.0 + 25 23	6429	14.3		
17 43.5 + 22 15		15.7		diffuse spiral
17 43.7 + 24 23		15.7		
17 44.3 + 26 34		14.5		
17 46.6 + 24 40		15.6		
17 47.7 + 25 48		14.8		
17 48.0 + 21 50		15.7		
17 48.2 + 22 58		15.5		
17 48.6 + 23 09		15.3		
17 48.7 + 25 27		15.7		compact
17 49.7 + 23 05	6482	12.8	+ 3922	m_H = 12.2 E
17 49.7 + 23 48		15.7		
17 49.7 + 24 30	6484	13.5		
17 50.0 + 21 35	1269*	14.5		
17 50.1 + 24 32		15.1		double system
17 50.6 + 23 45		15.7		
17 50.7 + 23 01		15.6		
17 50.8 + 23 14		15.0		
17 51.0 + 22 55		15.7		
17 51.2 + 24 35		14.9		
17 51.8 + 21 25		15.7		
17 51.8 + 24 28		15.0		
17 52.0 + 21 29		15.6		very compact
17 53.2 + 26 22		14.9		
17 53.3 + 25 26		15.5		double system
17 53.7 + 26 36		15.4		
17 54.3 + 26 22		15.5		
17 54.8 + 24 01		15.7		
17 55.5 + 23 02		15.5		diffuse spiral
17 55.7 + 23 53		15.4		
17 55.9 + 21 17		15.0		
17 57.5 + 24 54	6513	14.7		
17 57.9 + 26 20		15.7		
17 58.0 + 26 21		14.4		
17 58.6 + 23 03		15.6		
17 58.9 + 22 34		15.5		compact
17 59.0 + 24 44		15.2		
17 59.5 + 26 15		14.8		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
17 59.6	+ 22 35		15.7		double system
18 00.3	+ 26 02		14.6		
18 02.4	+ 21 38		15.7		extremely diffuse spiral
18 03.1	+ 25 13	6547	14.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6482	-	-	13.20	E3	13.1	E3	-	-





FIELD No. 142

18^h16^m $+24^\circ00'$

Survey Plate No. 1089

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
24670	18 03 55.4	+ 22 12 46	5.32
24708	18 05 29.5	+ 26 24 24	7.31
25003	18 17 07.1	+ 24 25 26	5.49
25116	18 21 33.9	+ 21 44 44	3.92
25169	18 24 18.5	+ 26 11 49	6.83
25250	18 27 31.2	+ 23 49 53	5.72

CLUSTERS OF GALAXIES

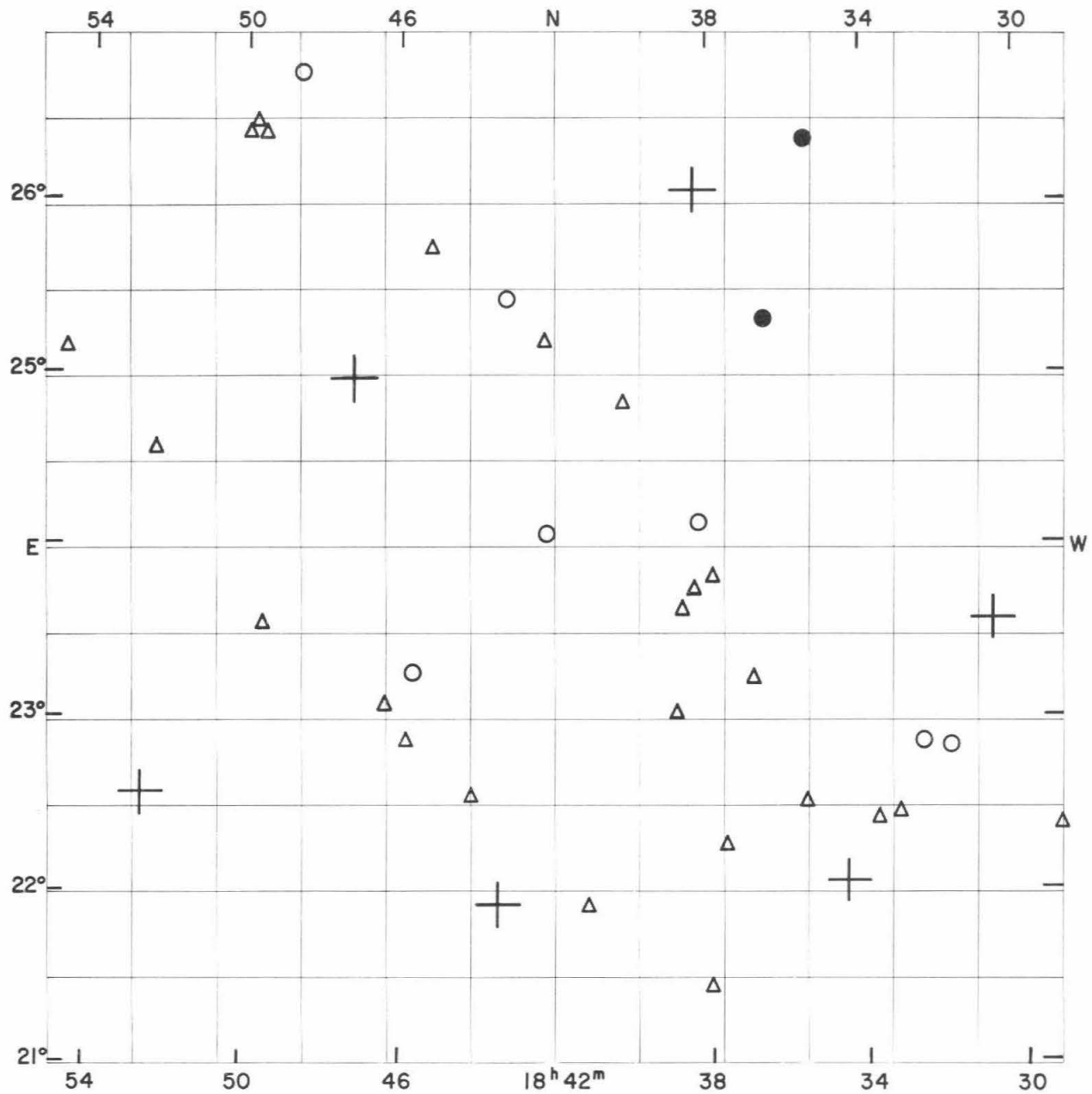
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1808.9 + 2531	open	101	12.6	Near	2
1812.3 + 2237	medium compact	210	18.5	Near	1

Average number of galaxies per cluster = 155.5

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
18 03.1	+ 25 13	6547	14.3		
18 03.3	+ 23 08		15.7		
18 03.4	+ 23 16		15.7		extremely diffuse spiral
18 04.0	+ 22 39		15.7		
18 04.0	+ 23 28		15.1		
18 04.4	+ 23 42		15.6		
18 06.0	+ 21 38		15.6		
18 08.4	+ 21 13		15.5		
18 08.6	+ 25 06		15.2		
18 08.7	+ 21 14	6571	15.4		compact
18 08.7	+ 25 11		15.7		
18 09.5	+ 21 34		15.6		
18 09.5	+ 25 38		15.4		
18 09.6	+ 21 25	6576	15.5		
18 09.7	+ 21 30		15.7		
18 09.8	+ 21 33		15.4		compact
18 09.9	+ 21 28	6577	14.7		
18 10.0	+ 25 35		15.5		
18 10.1	+ 21 53		14.9		
18 10.2	+ 21 35	6579=6580	15.7		
18 10.2	+ 25 39	1280*	15.4		compact
18 10.4	+ 21 25		14.5		triple system
18 10.4	+ 25 25	4697*	15.1		
18 10.5	+ 25 25		15.5		diffuse spiral
18 10.5	+ 25 31		14.7		
18 10.7	+ 25 24		15.5		
18 10.8	+ 25 29		15.7		
18 11.5	+ 21 05	6586	14.6		
18 11.9	+ 21 30		15.6		faint plume
18 12.0	+ 22 16	6593	15.3		
18 13.6	+ 24 54	6599	13.7		
18 13.7	+ 25 20		15.6		very diffuse spiral
18 14.4	+ 22 05		15.6		
18 14.5	+ 22 05		15.6		
18 14.5	+ 25 01		14.6		
18 15.6	+ 22 13	6616	15.2		
18 15.9	+ 26 44		14.4		
18 16.2	+ 21 16		14.8		
18 16.8	+ 23 38	6619	14.3		
18 17.5	+ 23 41	6623	14.4		double system
18 20.2	+ 23 27	6628	14.8		
18 21.7	+ 21 01		15.5		
18 22.7	+ 23 02		14.9		
18 23.5	+ 22 18		14.8		
18 24.0	+ 23 17		15.1		
18 24.4	+ 22 23		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
18 25.2 + 24 50		15.4		
18 26.2 + 22 42		15.1		
18 26.8 + 22 52	6641	14.3		
18 27.5 + 23 01		15.7		
18 27.6 + 22 58		15.2		
18 29.0 + 22 23		15.5		



FIELD No. 143

18^h42^m $+24^o00'$

Survey Plate No. 284

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
25328	18 30 41.2	+ 23 34 42	5.99
25434	18 34 30.1	+ 22 03 52	6.67
25548	18 38 20.3	+ 26 05 00	6.74
25695	18 43 28.3	+ 21 55 51	6.39
25810	18 47 11.1	+ 24 59 18	6.56
25954	18 52 38.2	+ 22 34 50	4.56

CLUSTERS OF GALAXIES

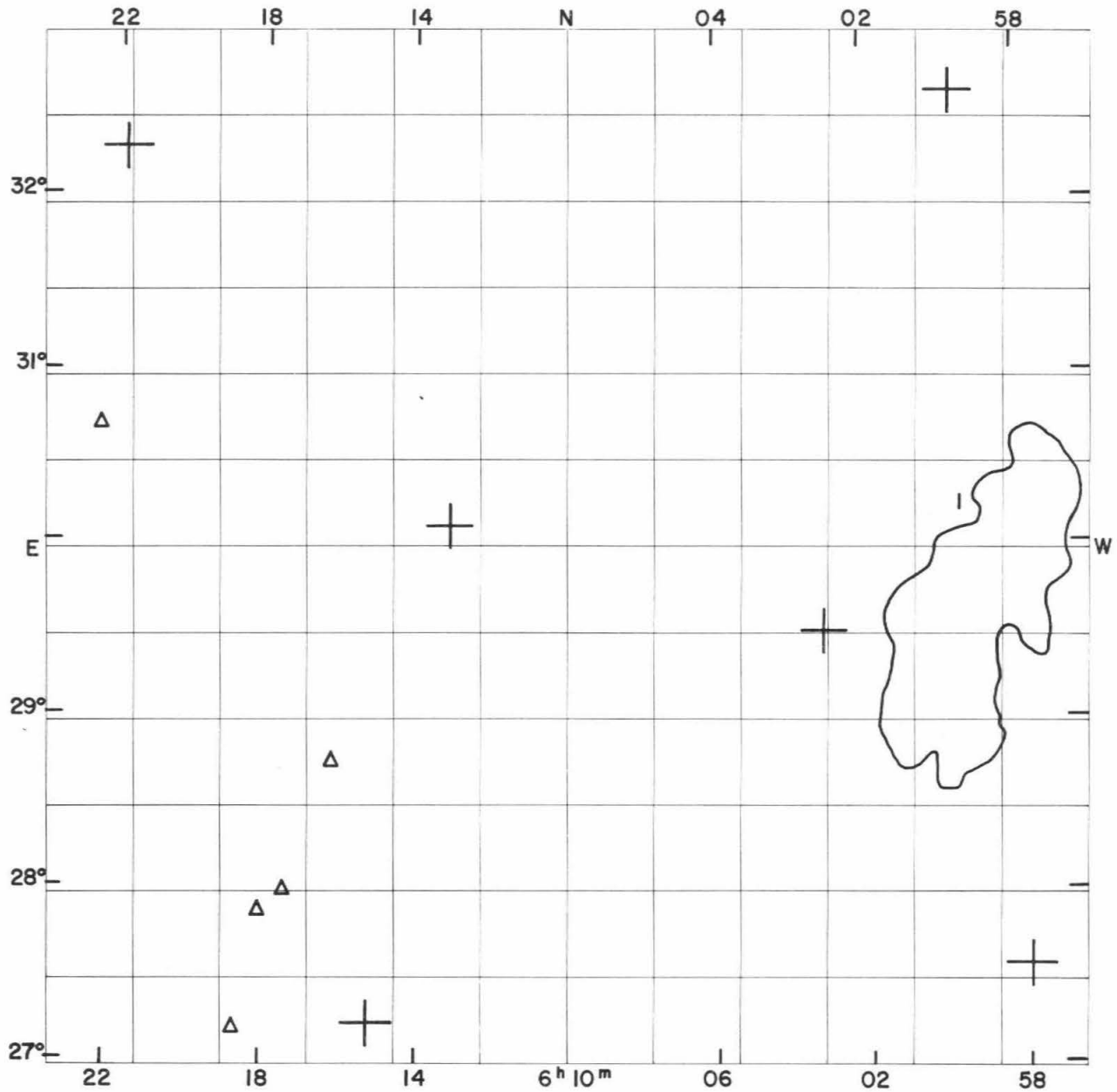
No clusters in this field

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
18 29.0	+ 22 23		15.5		
18 31.8	+ 22 51	6658	15.0	+ 4270	
18 32.5	+ 22 52	6661	14.1	+ 4282	
18 33.1	+ 22 28		15.3		
18 33.7	+ 22 25		15.1		
18 35.4	+ 26 22	6671	13.8		
18 35.5	+ 22 31		15.6		
18 36.5	+ 25 20	6674	13.7	+ 3502	
18 36.9	+ 23 15		15.4		
18 37.6	+ 22 16	6680	15.4		
18 37.9	+ 23 50		15.6		
18 38.0	+ 21 27		15.7		diffuse
18 38.2	+ 24 09		14.2		
18 38.4	+ 23 45		15.6		compact
18 38.7	+ 23 38		15.3		
18 38.9	+ 23 02		15.5		
18 40.2	+ 24 50		15.5		
18 41.1	+ 21 55		15.7		
18 42.1	+ 24 05		14.8		
18 42.2	+ 25 12		15.6		
18 43.2	+ 25 27	6697	14.5		
18 44.1	+ 22 34		15.7		extremely diffuse spiral
18 45.1	+ 25 44		15.4		
18 45.6	+ 23 17		15.0		
18 45.8	+ 22 53		15.4		
18 46.3	+ 23 06		15.6		
18 48.6	+ 26 46	6710	14.6	+ 4556	
18 49.4	+ 26 25		15.1		
18 49.5	+ 23 34		15.2		
18 49.7	+ 26 29		15.7		very diffuse
18 49.9	+ 26 25		15.5		
18 52.2	+ 24 35		15.6		diffuse
18 54.6	+ 25 10		15.3		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
6658	12.6	Sa	14.13	S0	14.1	S0	-	-
6661	13.7	Sa	13.11	S0	13.2	S0	-	-
6674	-	-	12.96	SBb	13.0	SBb	-	-
6710	-	-	14.19	Sa	14.2	Sa	-	-



FIELD No. 144

6^h10^m $+30^\circ00'$

Survey Plate No. 411

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
7597	5 57 51.9	+ 27 34 18	6.08
7636	5 59 38.3	+ 32 38 25	6.23
7725	6 03 10.9	+ 29 31 06	6.32
8009	6 13 08.2	+ 30 07 14	6.87
8069	6 15 12.8	+ 27 13 53	6.72
8269	6 21 57.2	+ 32 18 01	6.91

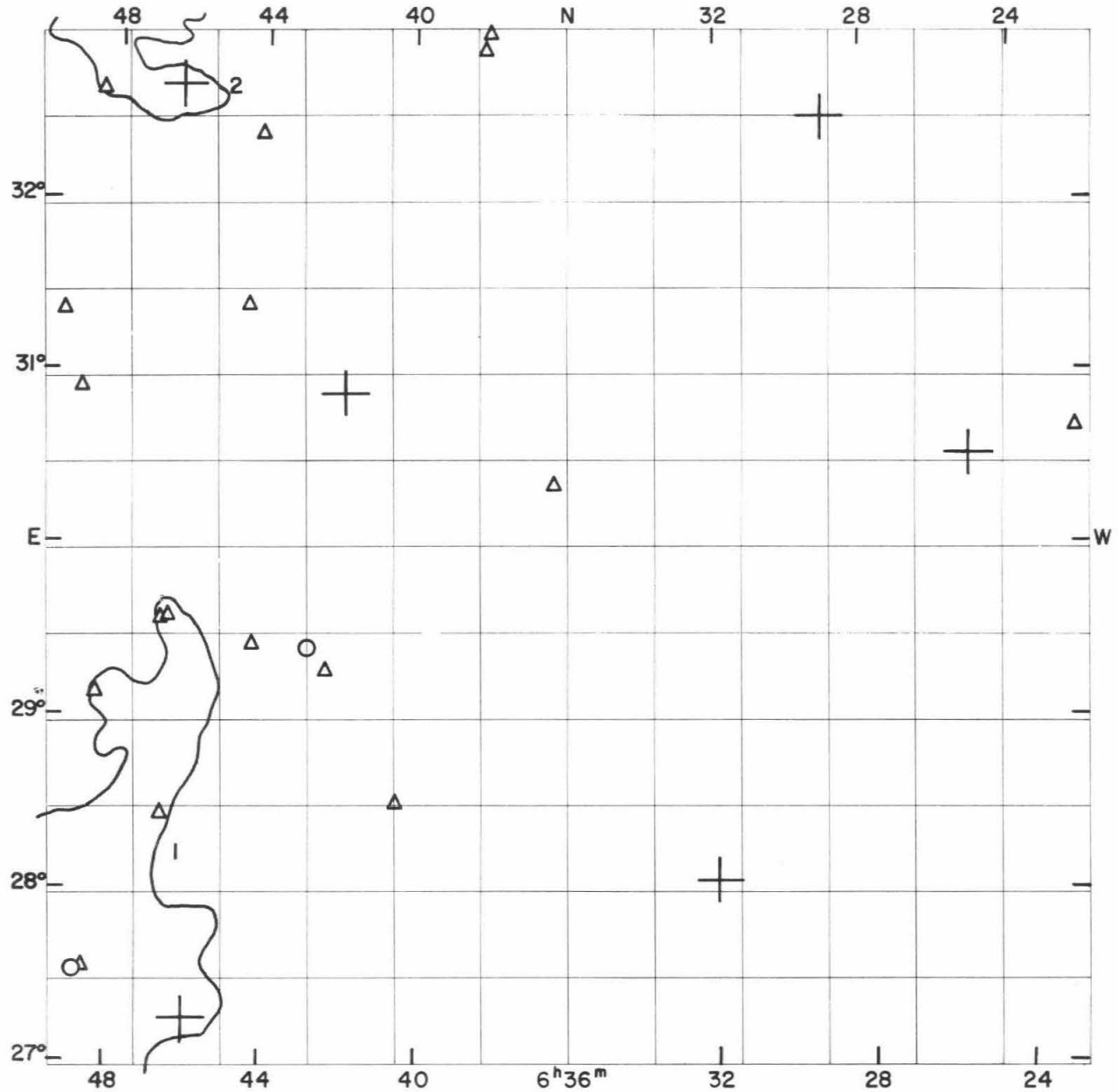
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0559.3 + 2935	medium compact	108	7.0	MD	1

Average number of galaxies per cluster = 108.0

GALAXIES

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
6 16.2	+ 28 45		15.7		
6 17.4	+ 28 00		15.6		
6 18.0	+ 27 53		15.6		
6 18.7	+ 27 12		15.7		
6 22.5	+ 30 40		15.2		



FIELD No. 145

$6^h36^m \quad +30^o00'$

Survey Plate No. 920

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
8371	6 25 21.3	+ 30 31 33	var.
8474	6 29 11.5	+ 32 29 33	var.
8557	6 32 03.2	+ 28 03 47	5.05
8815	6 41 57.2	+ 30 52 42	7.13
8906	6 46 02.9	+ 27 14 54	6.58
8915	6 46 25.9	+ 32 39 56	5.76

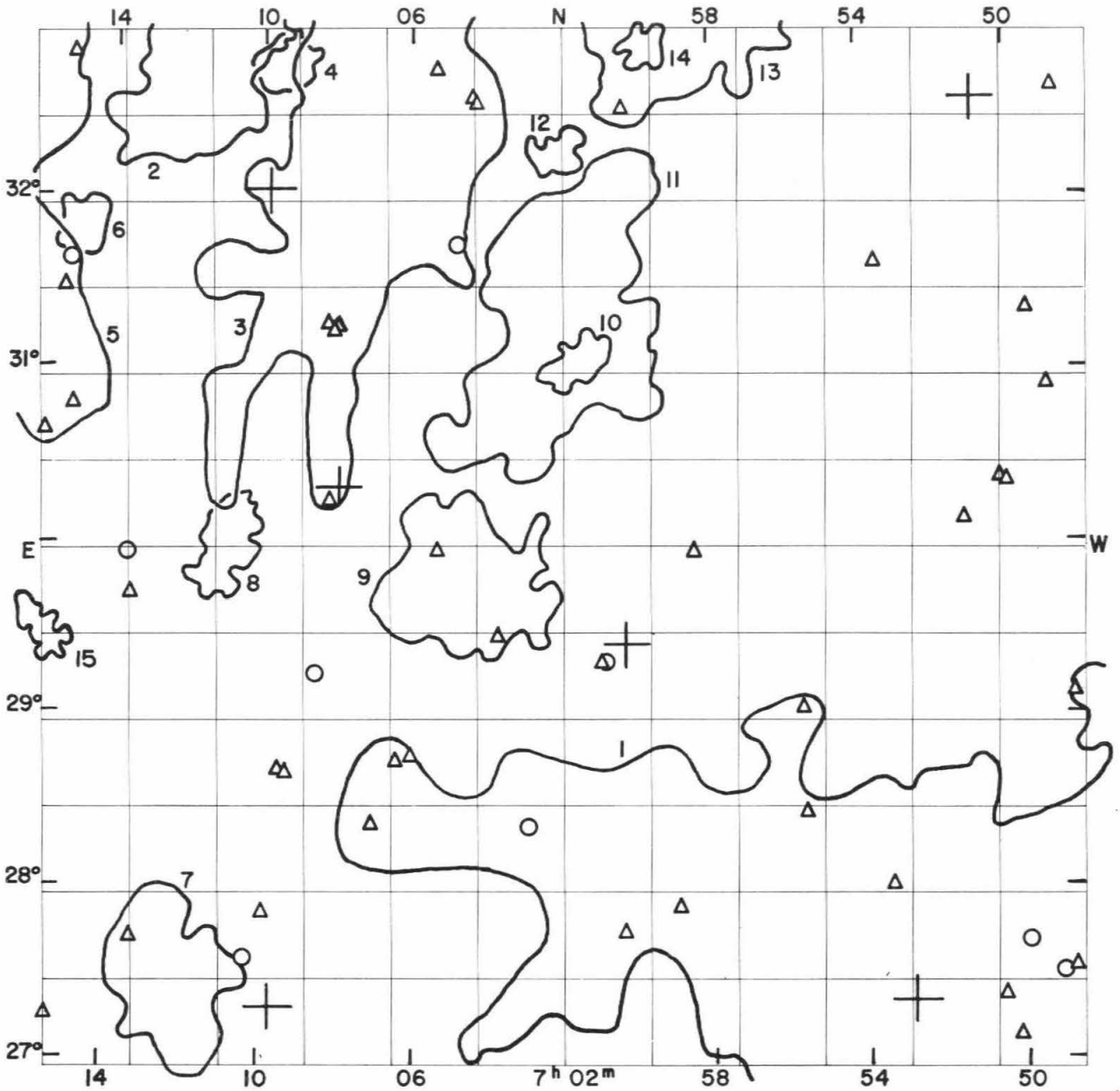
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0647.4 + 3323	open	167	7.5	Near	2
0654.8 + 2753	open	397	17.4	Near	1

Average number of galaxies per cluster = 282.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
6 22.5 + 30 40		15.2		
6 36.3 + 30 21		15.5		
6 38.0 + 32 58		15.6		
6 38.1 + 32 52		15.1		
6 40.5 + 28 30		15.5		
6 42.3 + 29 16		15.4		
6 42.8 + 29 24		14.4		
6 44.1 + 32 23		15.2		
6 44.3 + 29 25		15.2		
6 44.5 + 31 22		15.7		
6 46.5 + 29 35		15.7		
6 46.6 + 28 26		15.3		
6 46.7 + 29 35		15.5		
6 48.5 + 29 08		15.1		
6 48.7 + 27 33		15.2		
6 48.7 + 32 38		15.7		diffuse
6 48.9 + 27 32		14.9		compact
6 49.1 + 30 54		15.6		
6 49.5 + 31 20		15.3		



FIELD No. 146

7^h02^m $+30^\circ00'$

Survey Plate No. 1337

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	° ' "	
9016	6 50 52.3	+ 32 34 30	6.89
9074	6 52 49.0	+ 27 21 06	6.97
9292	7 00 19.9	+ 29 25 22	5.95
9484	7 07 57.5	+ 30 19 45	4.48
9532	7 09 42.5	+ 27 18 41	6.44
9537	7 09 50.8	+ 32 03 04	6.66

CLUSTERS OF GALAXIES

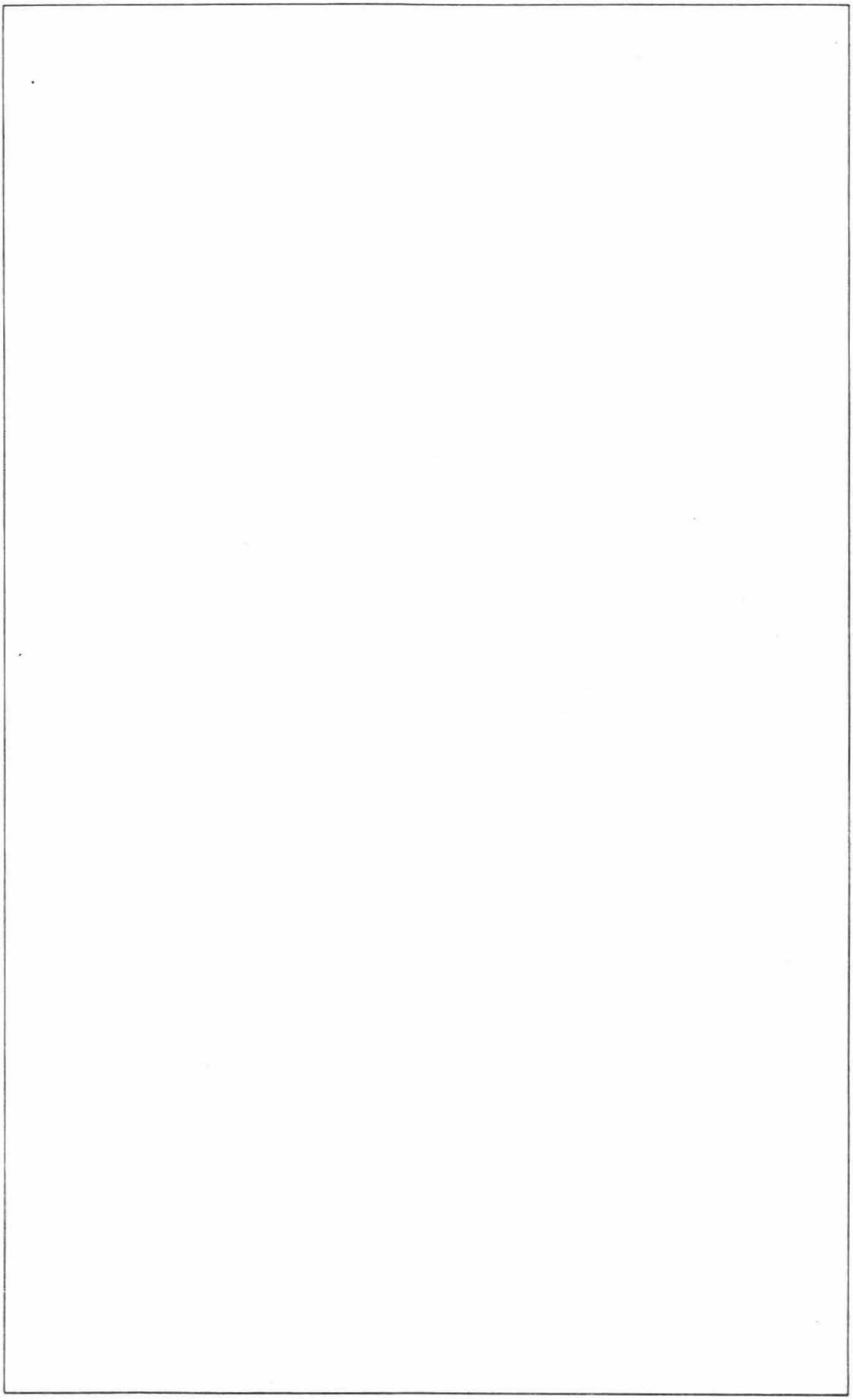
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0654.8 + 2753	open	397	17.4	Near	1
0658.7 + 3300	medium compact	165	5.5	MD	13
0659.8 + 3253	medium compact	74	1.6	VD	14
0701.6 + 3104	compact	68	1.8	VD	10
0701.8 + 3116	open	182	6.8	MD	11
0702.1 + 3215	compact	87	1.7	VD	12
0704.6 + 2947	compact	188	5.1	D	9
0706.6 + 3221	open	360	11.2	Near	3
0709.4 + 3246	medium compact	76	2.0	D	4
0710.9 + 2959	compact	98	2.3	D	8
0711.0 + 3311	medium compact	289	7.3	MD	2
0712.1 + 2727	medium compact	94	4.8	MD	7
0714.9 + 3149	compact	63	2.0	D	6
0715.8 + 2928	medium compact	83	1.6	VD	15
0718.6 + 3249	open	362	14.7	Near	5

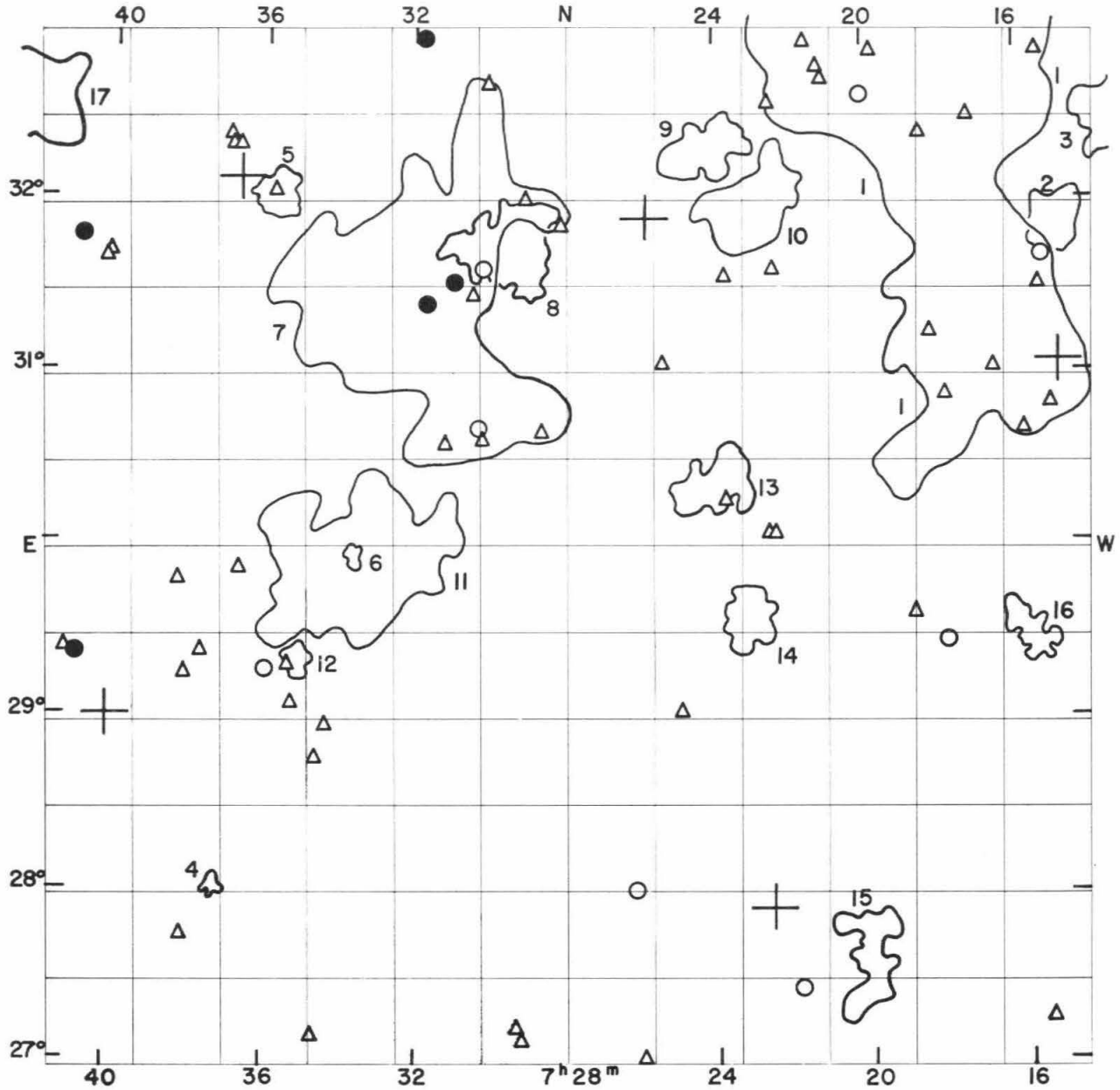
Average number of galaxies per cluster = 172.4

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
6 48.5 + 29 08		15.1		
6 48.7 + 27 33		15.2		
6 48.7 + 32 38		15.7		diffuse
6 48.9 + 27 32		14.9		compact
6 49.1 + 30 54		15.6		
6 49.5 + 31 20		15.3		
6 49.9 + 27 42		15.0		
6 50.2 + 27 09		15.4		
6 50.2 + 30 21		15.6		
6 50.4 + 30 23		15.7		
6 50.5 + 27 23		15.5		diffuse
6 51.4 + 30 08		15.3		
6 53.4 + 28 01		15.7		
6 53.6 + 31 38		15.7		
6 55.6 + 28 28		15.3		
6 55.7 + 29 05		15.2		
6 58.5 + 29 58		15.7		
6 58.9 + 27 55		15.1		
7 00.4 + 27 46		15.6		
7 00.4 + 32 32		15.7		
7 00.8 + 29 20		14.6		
7 00.9 + 29 20		15.4		
7 02.9 + 28 23		14.9		
7 03.7 + 29 30		15.6		
7 04.3 + 32 33	2176*	15.1		
7 04.4 + 32 36	2178*	15.7		
7 04.8 + 31 45		14.7		double system
7 05.3 + 29 58		15.7		
7 05.4 + 32 47		15.3		
7 06.0 + 28 47		15.7		very diffuse
7 06.4 + 28 45		15.6		double nebula
7 07.0 + 28 23		15.3		
7 08.0 + 31 16		15.2		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 08.1 +31 14		15.7		
7 08.2 +30 15		15.3		
7 08.2 +31 17		15.4		
7 08.5 +29 16		14.8		
7 09.2 +28 40		15.5		
7 09.3 +28 41		15.2		
7 09.8 +27 52		15.1		
7 10.3 +27 37		14.9		
7 13.3 +27 43		15.6		very diffuse
7 13.4 +29 42		15.6		double nebula
7 13.5 +29 57		14.5		
7 15.0 +30 48		15.6		
7 15.2 +31 39		15.0		
7 15.2 +32 50		15.7		
7 15.3 +31 28		15.2		double system, twins
7 15.4 +27 15		15.3		
7 15.8 +30 38		15.3		





FIELD No. 147

7^h28^m $+30^\circ00'$

Survey Plate No. 678

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
9688	7 14 52.4	+ 31 02 51	5.98
9897	7 22 37.4	+ 27 53 57	3.89
9987	7 25 53.9	+ 31 53 08	4.18
10280	7 36 42.4	+ 32 07 34	6.14
10373	7 40 11.4	+ 29 00 23	4.26

CLUSTERS OF GALAXIES

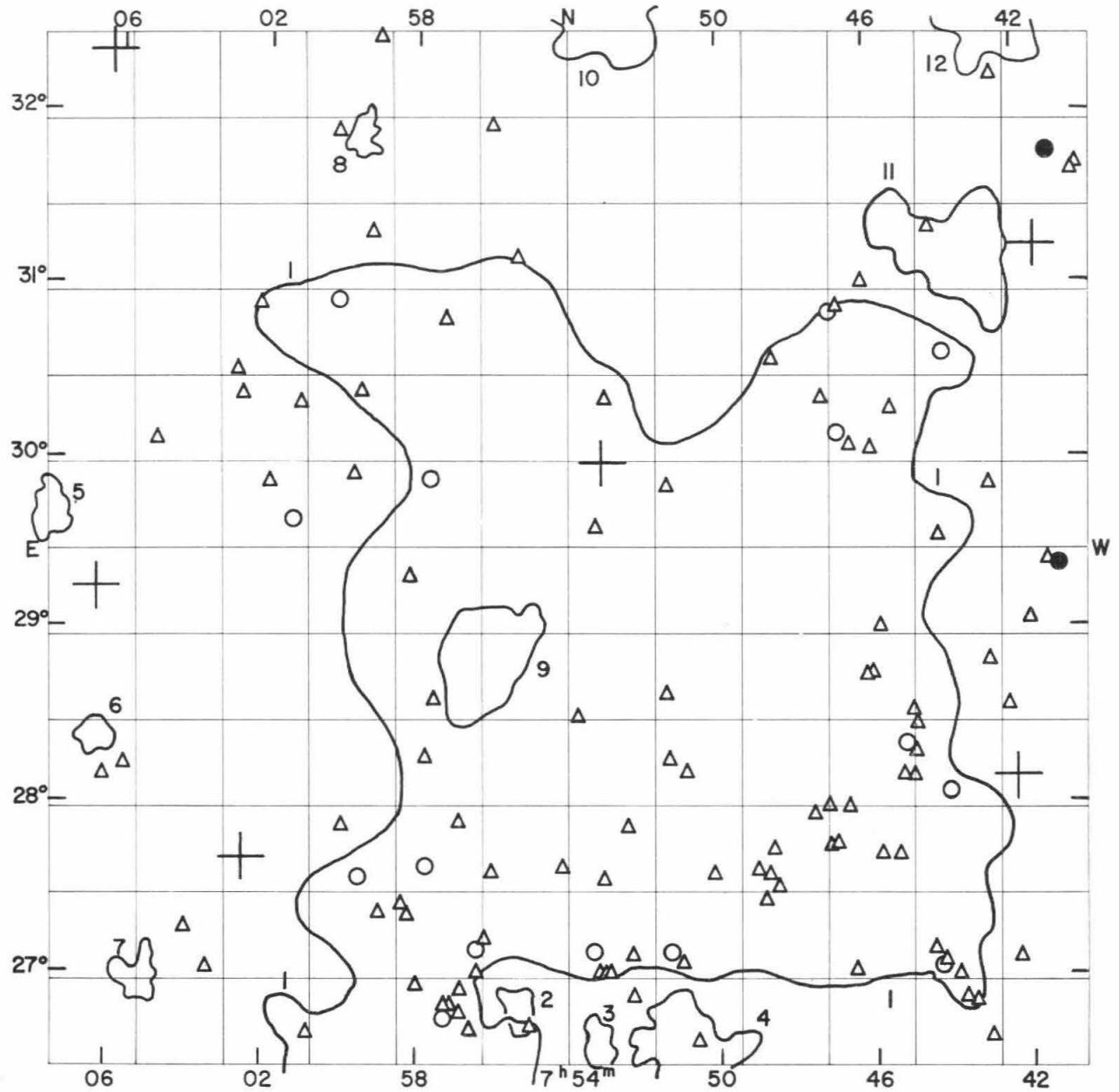
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0711.0 + 3311	medium compact	289	7.3	MD	3
0714.9 + 3149	compact	63	2.0	D	2
0715.8 + 2928	medium compact	83	1.6	VD	16
0718.6 + 3249	open	362	14.7	Near	1
0720.1 + 2736	medium compact	91	2.3	D	15
0723.0 + 3156	medium compact	191	2.8	D	10
0723.2 + 2935	compact	94	2.0	VD	14
0724.0 + 3020	open	119	2.2	VD	13
0724.2 + 3216	medium compact	145	2.2	VD	9
0729.4 + 3142	compact	427	2.7	VD	8
0731.9 + 3125	open	178	8.0	Near	7
0733.5 + 2952	open	117	5.4	MD	11
0733.6 + 2956	compact	54	0.5	ED	6
0735.1 + 2920	compact	60	1.0	VD	12
0735.8 + 3200	compact	128	1.4	VD	5
0737.3 + 2801	compact	49	0.6	ED	4
0742.4 + 3232	open	86	3.3	MD	17

Average number of galaxies per cluster = 149.2

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
7 15.0 +30 48		15.6		
7 15.2 +31 39		15.0		
7 15.2 +32 50		15.7		
7 15.3 +31 28		15.2		double system, twins
7 15.4 +27 15		15.3		
7 15.8 +30 38		15.3		
7 16.6 +31 01		15.1		
7 17.1 +32 28		15.6		
7 17.9 +29 27		14.9		
7 17.9 +30 51		15.7		very diffuse
7 18.3 +31 13		15.7		
7 18.4 +32 22		15.2		
7 18.8 +29 36		15.5		very diffuse
7 19.7 +32 51		15.7		very diffuse
7 20.0 +32 36	2185*	14.9		
7 21.0 +32 42		15.3		
7 21.2 +32 45		15.6		
7 21.5 +32 55		15.3		
7 21.9 +27 26		14.8		
7 22.4 +30 04		15.6		
7 22.5 +31 35		15.5		
7 22.6 +30 04		15.2		double system with bridge
7 22.6 +32 33		15.6		
7 23.7 +30 15		15.3		diffuse
7 23.8 +31 34		15.7		
7 25.0 +29 02		15.2		
7 25.4 +31 02		15.4		
7 25.9 +27 01		15.2		galaxy with filaments
7 26.1 +28 01		14.4		
7 28.1 +31 50		15.4		
7 28.6 +30 39		15.7		extremely diffuse

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 29.0 +31 59		15.6		double system, connected
7 29.2 +27 08		15.5		
7 29.3 +27 13		15.6		
7 30.0 +32 40		15.4		
7 30.2 +30 37		15.7		
7 30.2 +31 36	2193*	14.7		
7 30.3 +30 40		14.6		
7 30.5 +31 27	2194*	15.1		
7 30.9 +31 31	2196*	14.0		
7 31.3 +30 35		15.7		double system
7 31.7 +31 23	2199*	13.6		
7 31.8 +32 56	2410	13.9		
7 34.4 +28 57		15.6		extremely diffuse
7 34.6 +27 09		15.3		
7 34.6 +28 46		15.3		compact
7 35.3 +29 05		15.6		
7 35.4 +29 19		15.7		very diffuse
7 35.8 +32 01		15.6		very compact
7 35.9 +29 17		14.9		
7 36.6 +29 51		15.7		extremely diffuse
7 36.8 +32 19		15.5		
7 36.9 +32 20		15.6		
7 37.0 +32 23		15.4		
7 37.6 +29 23		15.7		
7 38.1 +27 44		15.4		
7 38.1 +29 15		15.3		
7 38.3 +29 47		15.5		
7 40.2 +31 41		15.7		
7 40.3 +31 39		15.7		
7 41.0 +29 21		13.6		
7 41.0 +31 46	2435	13.5		
7 41.2 +29 23		15.5		double system with filament



FIELD No. 148

7^h54^m $+29^o30'$

Survey Plate No. 1344

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
10408	7 41 28.0	+ 31 14 06	7.7
10438	7 42 15.6	+ 28 08 55	1.21
10720	7 53 08.1	+ 29 59 08	6.86
10967	8 02 33.3	+ 27 40 24	6.16
11060	8 06 20.8	+ 32 22 09	6.74
11064	8 06 30.0	+ 29 14 25	6.56

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0742.4 + 3232	open	86	3.3	MD	12
0743.5 + 3110	compact	121	3.7	Near	11
0750.9 + 2634	medium compact	146	3.0	MD	4
0752.7 + 3236	open	158	3.8	D	10
0752.9 + 2833	open	933	22.8	Near	1
0753.1 + 2635	compact	127	1.3	D	3
0755.2 + 2649	compact	132	1.1	VD	2
0756.2 + 2850	medium compact	152	3.4	MD	9
0759.4 + 3152	compact	61	1.3	D	8
0805.1 + 2658	medium compact	88	1.5	VD	7
0806.5 + 2822	compact	112	1.1	VD	6
0807.7 + 2940	medium compact	135	1.4	VD	5

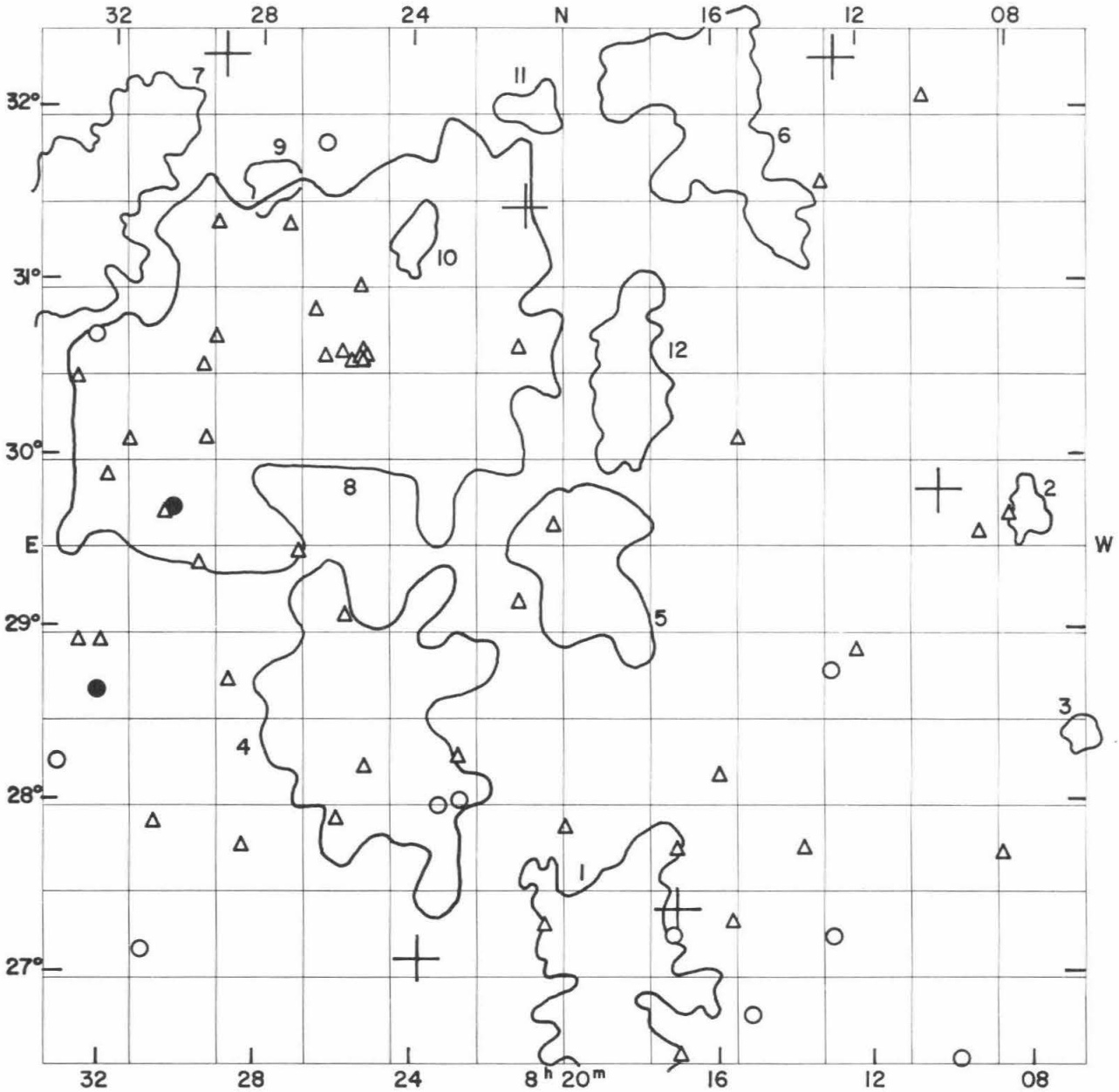
Average number of galaxies per cluster = 187.6

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 40.2 + 31 41		15.7		
7 40.3 + 31 39		15.7		
7 41.0 + 29 21		13.6		
7 41.0 + 31 46	2435	13.5		
7 41.2 + 29 23		15.5		double system with filament
7 41.8 + 29 03		15.3		diffuse
7 42.3 + 27 05		15.4		
7 42.4 + 28 34		15.6		
7 42.5 + 32 13		15.5		diffuse
7 42.8 + 29 50		15.5		compact
7 42.9 + 28 49		15.6		
7 43.1 + 26 38	474*	15.2		
7 43.5 + 26 50		15.7		
7 43.7 + 26 52		15.5		
7 43.8 + 27 00	2205*	15.2		
7 44.0 + 28 04		14.7		
7 44.0 + 30 37	475*	14.9		
7 44.2 + 27 04	476*	15.5		
7 44.2 + 29 32		15.5		diffuse
7 44.3 + 27 03	2449	14.3		
7 44.3 + 31 20		15.6		diffuse
7 44.5 + 27 08	2450	15.3		
7 44.8 + 28 17		15.5		compact
7 44.8 + 28 27		15.6		
7 44.9 + 28 32		15.6		
7 45.0 + 28 09		15.6		
7 45.1 + 28 20		14.4		double system
7 45.2 + 28 09		15.5		
7 45.3 + 27 42		15.7		
7 45.4 + 30 16		15.6		
7 45.7 + 29 01		15.2		
7 45.8 + 27 41		15.5		
7 45.9 + 30 03		15.6		
7 46.0 + 28 45		15.4		
7 46.1 + 28 44		15.6		
7 46.1 + 31 01		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
7 46.5 + 27 02		15.1		
7 46.5 + 30 04		15.2		
7 46.6 + 27 58		15.5		diffuse
7 46.8 + 30 09		15.0		
7 46.8 + 30 52		15.4		
7 46.9 + 27 45		15.7		
7 47.0 + 27 45		15.6		
7 47.0 + 30 51		14.5		
7 47.1 + 27 59		15.6		
7 47.2 + 30 21		15.2		
7 47.6 + 27 56		15.5		
7 48.5 + 27 30		15.5		
7 48.5 + 30 34		15.5		
7 48.6 + 27 44		15.5		
7 48.7 + 27 35		15.6		
7 48.8 + 27 26		15.7		
7 49.0 + 27 37		15.2		
7 50.2 + 27 35		15.4		
7 50.6 + 26 37	478*	15.2		
7 50.8 + 28 10		15.6		
7 51.0 + 27 05		15.3		
7 51.3 + 27 08	479*	15.0		
7 51.3 + 28 15		15.7		
7 51.4 + 28 38		15.7		
7 51.4 + 29 50		15.6		
7 52.3 + 26 52	480*	15.2		
7 52.3 + 27 06		15.6		
7 52.4 + 27 52		15.7		
7 52.8 + 27 01		15.4		
7 53.0 + 27 00		15.6		
7 53.0 + 27 34		15.7		
7 53.0 + 30 20		15.6		
7 53.1 + 27 01		15.7		
7 53.2 + 29 36		15.2		
7 53.3 + 27 09		15.0		
7 53.7 + 28 31		15.7		
7 54.1 + 27 37		15.5		
7 55.0 + 26 42		15.5		
7 55.3 + 31 10		15.5		
7 56.0 + 27 36	2213*	15.4		double system
7 56.0 + 31 56		15.7		extemely diffuse spiral
7 56.2 + 27 13	2490	15.3		compact
7 56.4 + 27 01		15.4		
7 56.4 + 27 10	2492	14.4		
7 56.5 + 26 42		15.6		
7 56.8 + 26 56		15.7		
7 56.8 + 27 54		15.6		
7 56.9 + 26 48	484*	15.3		
7 57.1 + 26 50		15.7		
7 57.2 + 30 48		15.7		
7 57.3 + 26 45	486*	14.7		
7 57.3 + 26 50	485*	15.5		
7 57.6 + 28 37		15.7		
7 57.6 + 29 53		15.0		
7 57.7 + 27 38	2217*	14.2		
7 57.8 + 28 16		15.7		
7 58.0 + 26 56		15.7		double system with bridge
7 58.2 + 27 21		15.7		
7 58.2 + 29 19		15.4		very compact

Position α 1950 δ				NGC IC*	m_p	V_s km/sec	Remarks
h	m	°	′				
7	58.4	+27	25		15.5		compact
7	59.0	+27	22		15.5		diffuse
7	59.0	+32	27		15.3		
7	59.2	+31	19		15.5		compact
7	59.5	+27	35	2219*	14.5		
7	59.5	+30	23		15.5		
7	59.6	+29	55		15.6		
7	59.9	+27	53		15.6		
8	00.0	+30	55		14.9		
8	00.0	+31	55		15.7		
8	00.8	+26	40	491*	15.3		double system with bridge
8	01.0	+30	19		15.4		
8	01.2	+29	38		14.6		double system
8	01.9	+29	51		15.5		
8	02.1	+30	53		15.6		double nebula, connected
8	02.6	+30	22		15.5		
8	02.8	+30	30		15.7		
8	03.4	+27	02		15.5		
8	04.0	+27	16		15.2		double nebula
8	04.9	+30	05		15.6		diffuse
8	05.6	+28	13		15.4		
8	06.1	+28	09		15.3		diffuse



FIELD No. 149

8^h20^m $+29^\circ30'$

Survey Plate No. 1351

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
11163	8 10 03.2	+ 29 48 29	5.59
11231	8 12 40.5	+ 32 19 52	7.41
11348	8 17 01.8	+ 27 22 52	5.16
11449	8 20 59.2	+ 31 27 48	7.48
*) 11519/20	8 23 45.8	+ 27 05 59	5.56
11672	8 29 07.2	+ 32 20 27	7.60

*) Mean position and integrated magnitude.

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0806.5 + 2822	compact	112	1.1	VD	3
0807.7 + 2940	medium compact	135	1.4	VD	2
0816.0 + 3155	open	324	5.6	D	6
0818.1 + 3027	medium compact	269	3.7	D	12
0818.6 + 2702	open	203	5.7	MD	1
0819.3 + 2923	open	164	4.5	MD	5
0820.8 + 3200	medium compact	97	1.7	VD	11
0824.0 + 3115	medium compact	144	1.5	ED	10
0825.0 + 2824	medium compact	392	7.8	MD	4
0826.2 + 3039	compact	778	13.5	Near	8
0827.9 + 3133	medium compact	93	1.6	D	9
0832.9 + 3119	medium compact	445	6.3	MD	7

Average number of galaxies per cluster = 263.0

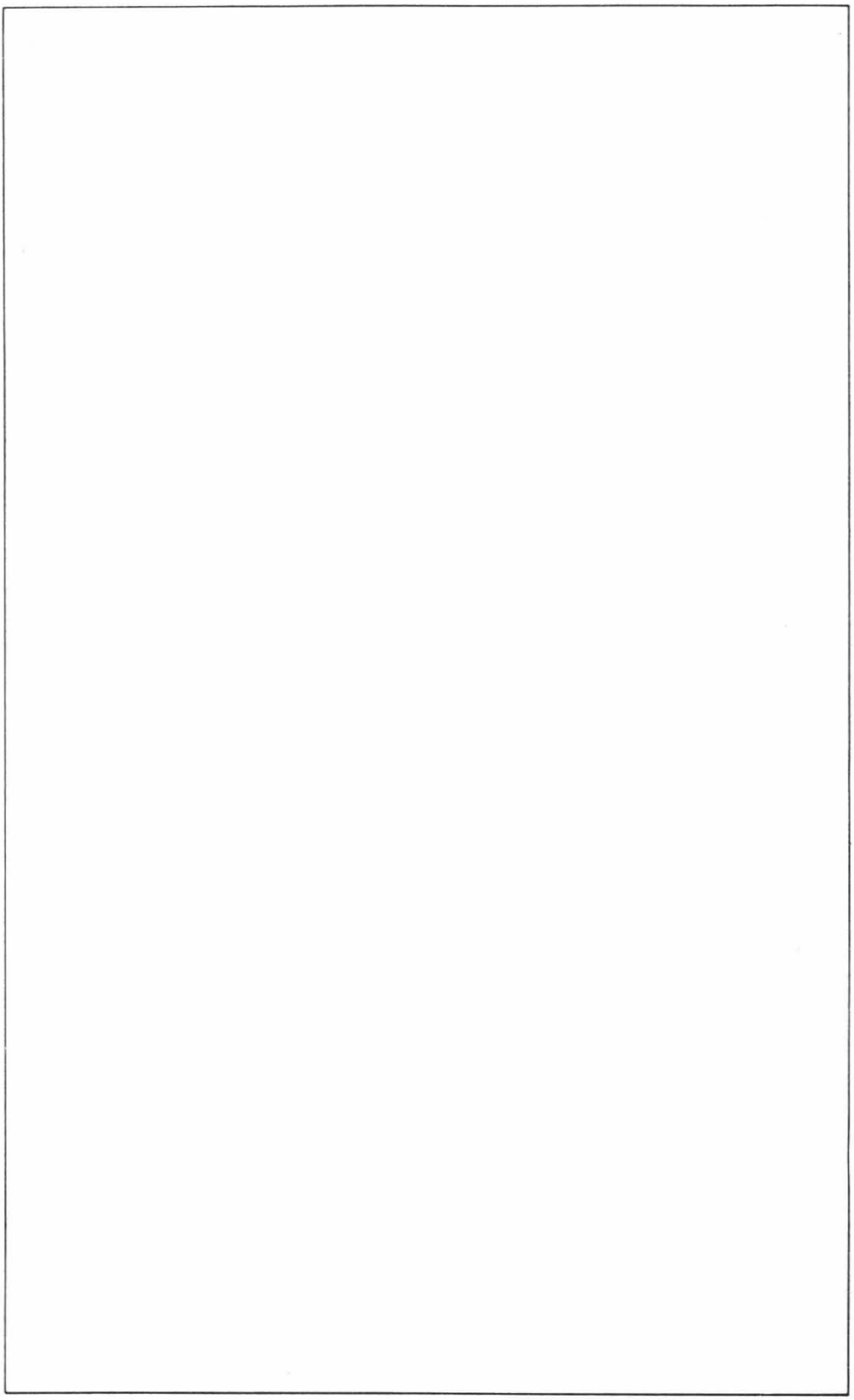
GALAXIES

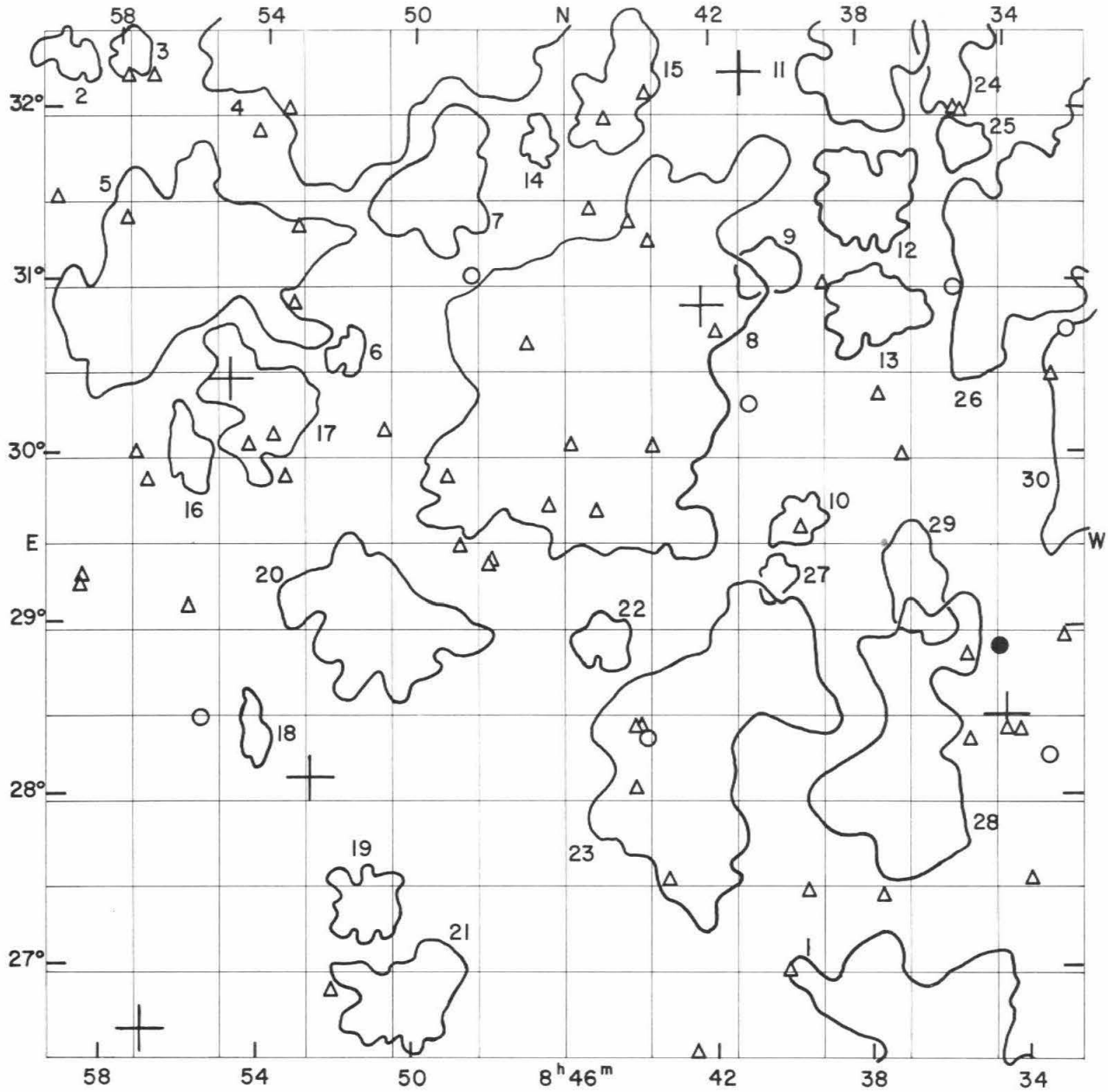
Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
8 08.2 + 29 39		15.4		compact
8 08.7 + 27 41		15.6		
8 09.0 + 29 33		15.5		
8 09.8 + 26 31	2540	14.5		
8 10.2 + 32 06		15.7		
8 12.3 + 28 54		15.3		
8 13.0 + 27 14		14.7		
8 13.0 + 28 47		14.6		
8 13.0 + 31 36		15.7		
8 13.8 + 27 45		15.7		
8 15.1 + 26 48		15.0		
8 15.3 + 30 07		15.7		
8 15.6 + 27 19		15.6		diffuse double system
8 15.9 + 28 10		15.6		
8 17.0 + 26 32		15.7		
8 17.0 + 27 45		15.4		compact
8 17.1 + 27 15		15.0		
8 20.0 + 27 52		15.5		
8 20.2 + 29 38		15.6		diffuse
8 20.5 + 27 18		15.4		diffuse
8 21.1 + 29 11		15.7		
8 21.1 + 30 39		15.6		
8 22.7 + 28 03		14.9		
8 22.7 + 28 17		15.5		
8 23.3 + 28 00	2365*	14.7		
8 25.2 + 28 14		15.2		
8 25.2 + 30 37		15.5		
8 25.2 + 30 39		15.7		
8 25.3 + 30 35	2374*	15.3		triple system
8 25.3 + 31 00		15.6		
8 25.4 + 30 36	2378*	15.3		double nebula
8 25.6 + 30 35	2380*	15.5		
8 25.7 + 29 05		15.6		
8 25.8 + 27 55		15.6		diffuse
8 25.8 + 30 37		15.5		double system
8 26.3 + 30 35		15.6		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	° ′				
8	26.3	+31 50		14.9		
8	26.5	+30 51	2383*	15.7		
8	26.9	+29 27		15.6		
8	27.2	+31 21		15.7		
8	28.4	+27 45		15.3		
8	28.7	+28 43		15.3		
8	29.2	+30 42		15.4		
8	29.2	+31 21		15.6		
8	29.4	+30 07		15.6		
8	29.5	+30 32		15.5		double system
8	29.6	+29 23		15.7		
8	30.3	+29 43	2604	13.5		
8	30.5	+29 40		15.6		
8	30.6	+27 54		15.1		
8	30.9	+27 09	2607	14.9		
8	31.4	+30 06		15.5		multiple system
8	32.0	+29 53		15.5		diffuse spiral
8	32.1	+28 56		15.6		
8	32.2	+28 39	2608	13.2	+2119	
8	32.4	+30 43		15.0		
8	32.7	+28 56		15.3		double nebula
8	32.9	+30 26		15.1		compact
8	33.2	+28 14		14.9		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2608	-	-	12.83	Sc	12.8	Sa	-	-





FIELD No. 150

8^h46^m $+29^\circ30'$

Survey Plate No. 924

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
11803	8 34 20.3	+ 28 28 13	6.72
12005	8 41 09.6	+ 32 14 37	6.92
12037	8 42 17.6	+ 30 52 49	6.14
12326	8 52 40.2	+ 28 07 11	5.25
12388	8 54 56.7	+ 30 25 38	6.20
12427	8 57 00.6	+ 26 37 47	6.63

CLUSTERS OF GALAXIES

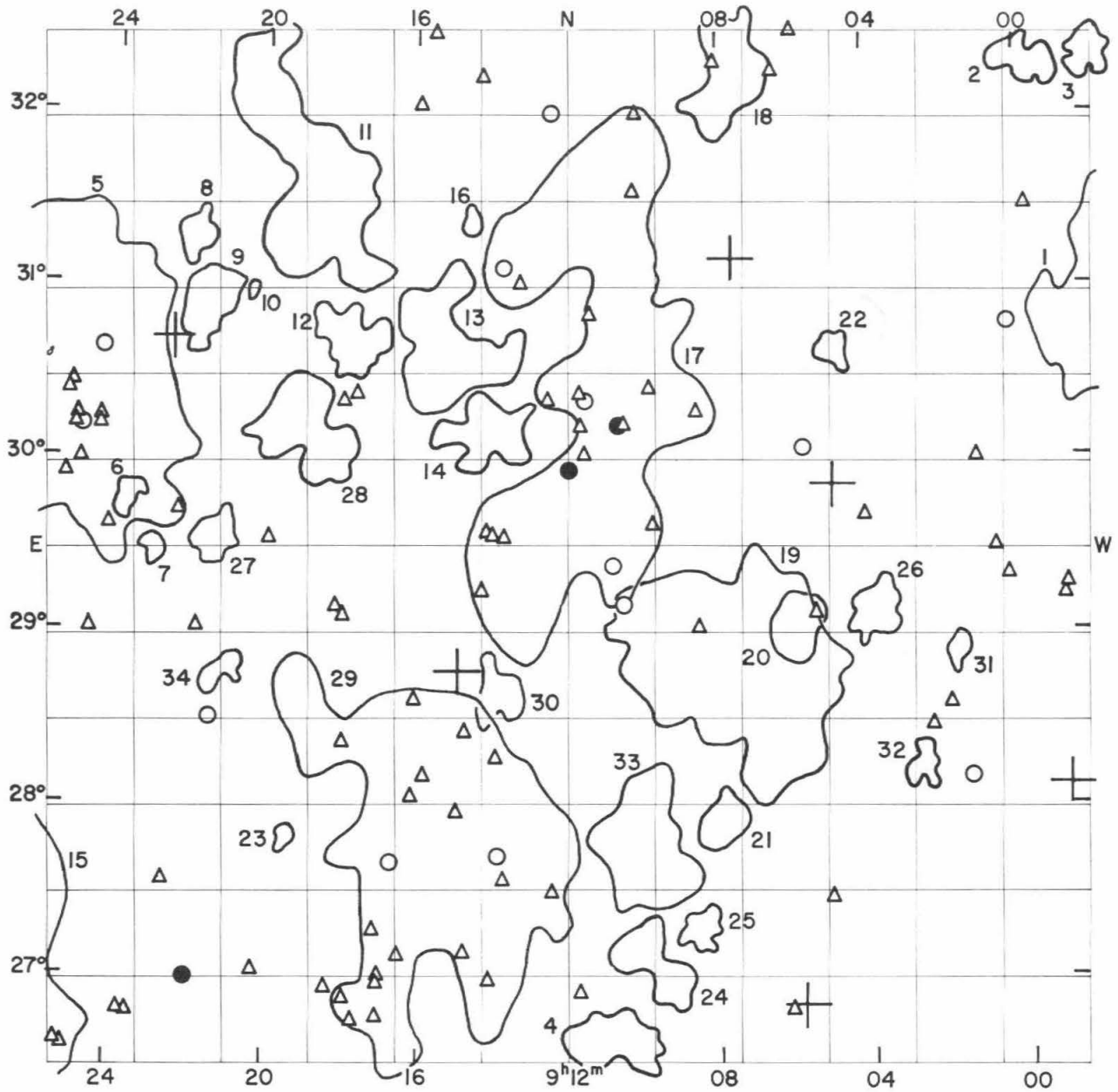
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0826.2 + 3039	compact	778	13.5	Near	30
0832.9 + 3119	medium compact	445	6.3	MD	26
0835.1 + 3148	medium compact	148	1.6	ED	25
0835.4 + 3225	medium compact	127	3.2	D	24
0836.6 + 2915	medium compact	140	2.9	VD	29
0837.0 + 2506	open	403	12.7	Near	1
0837.0 + 2815	open	179	5.4	MD	28
0837.6 + 3050	open	203	2.8	VD	13
0837.6 + 3238	medium compact	329	5.0	MD	11
0837.8 + 3130	open	204	3.1	D	12
0839.9 + 2937	compact	182	1.6	ED	10
0840.5 + 2917	medium compact	100	1.3	ED	27
0840.6 + 3105	medium compact	188	1.9	ED	9
0842.3 + 2820	open	280	7.6	Near	23
0844.5 + 3208	open	171	3.3	D	15
0844.9 + 2856	medium compact	195	1.6	VD	22
0845.0 + 3030	medium compact	739	10.9	MD	8
0846.6 + 3150	medium compact	146	1.2	VD	14
0849.4 + 3133	open	129	3.8	D	7
0850.2 + 2650	open	158	3.6	D	21
0850.5 + 3237	open	510	9.8	MD	4
0850.9 + 2903	medium compact	212	4.8	MD	20
0851.2 + 2723	compact	206	2.3	VD	19
0851.8 + 3036	compact	73	1.3	ED	6
0854.0 + 3017	open	188	3.7	D	17
0854.1 + 2824	medium compact	149	1.5	ED	18
0856.0 + 2959	compact	202	1.9	VD	16
0856.2 + 3103	medium compact	390	7.4	MD	5
0857.8 + 3220	medium compact	219	1.5	ED	3
0859.5 + 3217	medium compact	149	1.6	ED	2

Average number of galaxies per cluster = 251.4

GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
8 32.4 + 30 43		15.0		
8 32.7 + 28 56		15.3		double nebula
8 32.9 + 30 26		15.1		compact
8 33.2 + 28 14		14.9		
8 33.9 + 27 31		15.6		diffuse
8 34.1 + 28 24		15.7		
8 34.5 + 28 25		15.6		
8 34.6 + 28 53	2619	13.6		
8 35.2 + 31 59		15.7		
8 35.4 + 28 40		15.5		
8 35.4 + 28 50		15.6		
8 35.4 + 32 00		15.5		
8 35.5 + 30 58	2387*	14.8		
8 37.0 + 30 00		15.7		diffuse
8 37.6 + 30 21		15.7		
8 37.7 + 27 26		15.7		
8 39.0 + 31 00		15.5		
8 39.7 + 27 28		15.4		

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
8	39.8	+ 29 35		15.7		
8	40.2	+ 27 00		15.3		
8	41.1	+ 30 18		14.7		
8	41.9	+ 30 44		15.7		
8	42.6	+ 26 30		15.5		
8	43.3	+ 27 33		15.1		
8	43.6	+ 30 04		15.6		
8	43.7	+ 31 15		15.6		
8	43.8	+ 28 22	2393*	14.6		
8	43.8	+ 32 07		15.7		
8	43.9	+ 28 27		15.6		
8	44.1	+ 28 05		15.6		diffuse
8	44.1	+ 28 27	2394*	15.2		
8	44.2	+ 31 22		15.7		
8	44.9	+ 31 58	2402*	15.5		
8	45.1	+ 29 41	2404*	15.5		
8	45.2	+ 31 27		15.6		
8	45.8	+ 30 04		15.6		
8	46.4	+ 29 43		15.5		diffuse spiral
8	47.0	+ 30 40		15.7		double system
8	47.9	+ 29 25		15.3		extremely compact
8	48.0	+ 29 23		15.5		
8	48.5	+ 31 04	2679+2680	14.3		double nebula
8	48.8	+ 29 29		15.6		
8	49.0	+ 29 54		15.7		diffuse
8	50.8	+ 30 09		15.5		triple system
8	52.0	+ 26 53		15.5		
8	53.0	+ 31 20		15.7		
8	53.2	+ 30 53		15.6		
8	53.4	+ 29 52		15.6		diffuse
8	53.4	+ 32 01		15.6		
8	53.7	+ 30 07		15.7		diffuse
8	54.1	+ 31 53		15.7		
8	54.4	+ 30 04		15.6		
8	55.5	+ 28 29		14.6		
8	55.9	+ 29 06		15.4		
8	57.0	+ 29 50		15.6		
8	57.1	+ 32 12		15.2		compact
8	57.3	+ 30 00		15.5		
8	57.7	+ 31 21		15.7		
8	57.8	+ 32 12		15.7		
8	58.8	+ 29 16		15.6		double nebula
8	58.9	+ 29 12		15.7		
8	59.6	+ 31 28		15.4		very compact



FIELD No. 151

9^h12^m $+29^o30'$

Survey Plate No. 1365

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
12471	8 58 50.3	+ 28 06 03	5.95
12593	9 05 00.2	+ 29 51 23	5.38
12615	9 05 51.1	+ 26 50 14	5.96
12657	9 07 37.7	+ 31 10 05	var.
12816	9 14 55.7	+ 28 46 41	7.26
12987	9 22 30.6	+ 30 42 44	7.77

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0856.2 + 3103	medium compact	390	7.4	MD	1
0857.8 + 3220	medium compact	219	1.5	ED	3
0859.5 + 3217	medium compact	149	1.6	ED	2
0901.7 + 2854	compact	65	0.8	ED	31
0902.6 + 2814	compact	88	1.1	ED	32
0903.9 + 2907	compact	129	1.6	VD	26
0904.9 + 3037	medium compact	100	1.0	ED	22
0906.0 + 2902	compact	106	1.8	VD	20
0907.4 + 2849	medium compact	314	6.0	MD	19
0907.5 + 3214	open	105	2.9	D	18
0908.0 + 2755	compact	124	1.5	VD	21
0908.5 + 2716	medium compact	75	1.2	VD	25
0909.7 + 2705	compact	95	2.2	D	24
0910.0 + 2745	open	151	3.7	D	33
0910.8 + 2639	medium compact	144	2.3	VD	4
0911.0 + 3025	open	190	9.8	Near	17
0913.8 + 2839	medium compact	161	1.6	VD	30
0914.1 + 3010	medium compact	145	2.3	VD	14
0914.5 + 3122	compact	61	0.7	ED	16
0915.0 + 2744	open	245	9.2	MD	29
0915.0 + 3037	medium compact	183	3.6	MD	13
0917.7 + 3041	compact	183	2.0	VD	12
0918.5 + 3140	open	226	5.2	D	11
0919.0 + 3010	open	166	3.0	VD	28
0919.4 + 2748	compact	72	0.6	ED	23
0920.4 + 3058	compact	44	0.5	ED	10
0921.1 + 2846	compact	100	1.1	ED	34
0921.3 + 2932	medium compact	118	1.4	ED	27
0921.6 + 3054	medium compact	134	2.0	VD	9
0922.0 + 3116	medium compact	127	1.2	VD	8
0922.9 + 2928	compact	74	0.7	ED	7
0923.6 + 2946	compact	105	0.9	ED	6
0926.5 + 3026	open	371	10.5	Near	5
0941.7 + 2430	open	770	33.6	Near	15

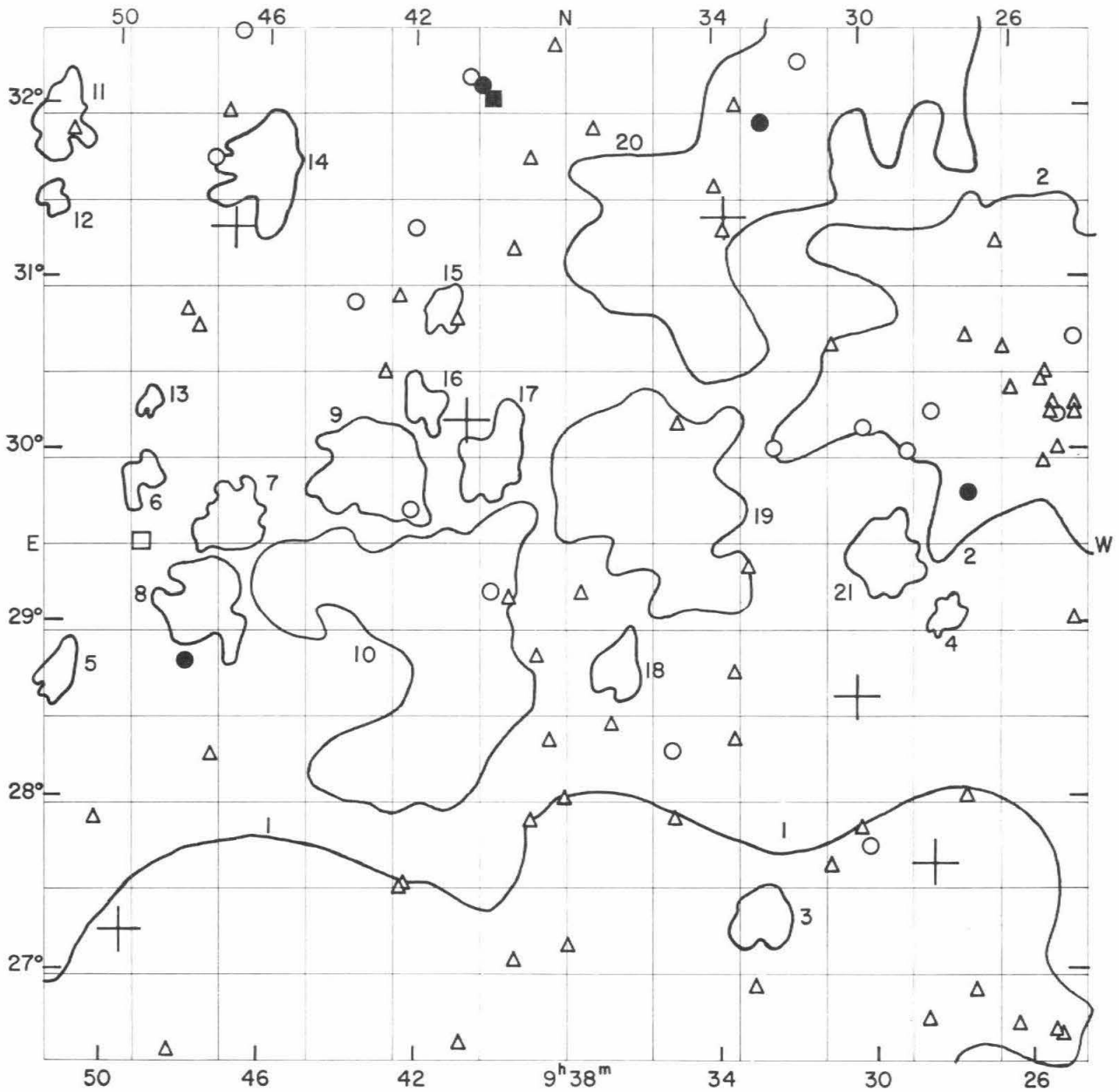
Average number of galaxies per cluster = 168.5

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
8 58.8 + 29 16		15.6		double nebula
8 58.9 + 29 12		15.7		
8 59.6 + 31 28		15.4		very compact
9 00.2 + 30 47	2428*	14.7		
9 00.3 + 29 19		15.6		
9 00.7 + 29 29	2429*	15.2		
9 01.1 + 30 00		15.4		
9 01.5 + 28 09	2430*	14.4		
9 01.9 + 28 35		15.3		
9 02.4 + 28 27		15.5		
9 04.1 + 29 40		15.7		triple system
9 05.1 + 27 27		15.3		
9 05.5 + 29 06		15.6		
9 05.8 + 30 04	2766	14.6		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 06.0 +32 29		15.5		
9 06.2 +26 48		15.6		
9 06.5 +32 15		15.7		
9 08.0 +32 18		15.5		
9 08.5 +29 01	2443*	15.1		
9 08.6 +30 16		15.4		
9 09.7 +29 38		15.6		
9 09.8 +30 25	2444*	15.1		
9 10.2 +31 33		15.5		
9 10.2 +32 00	2445*	15.2		
9 10.5 +29 10	2446*	15.0		
9 10.5 +30 12		15.2		
9 10.6 +30 11	2783	13.9		
9 10.8 +29 23		15.0		double nebula
9 11.4 +30 50		15.6		compact
9 11.5 +30 02		15.6		
9 11.6 +30 12		15.7		
9 11.6 +30 20		14.5		
9 11.7 +26 55		15.7		
9 11.7 +30 23		15.7		
9 12.0 +29 56	2789	13.8		
9 12.4 +27 30		15.6		
9 12.4 +32 00		15.0		
9 12.6 +30 20		15.6		
9 13.2 +31 01		15.6		
9 13.7 +27 34		15.7		
9 13.7 +29 33		15.6		compact
9 13.7 +31 07	2796	14.6		triple system
9 13.8 +27 42		14.9		
9 13.9 +28 16		15.7		
9 14.0 +29 34		15.7		
9 14.1 +26 59		15.5		
9 14.1 +29 35		15.7		
9 14.2 +32 13		15.7		
9 14.3 +29 14		15.7		compact
9 14.7 +27 08		15.6		
9 14.7 +28 25		15.6		
9 14.9 +27 56		15.3		
9 15.5 +32 28		15.6		
9 15.8 +28 10		15.7		
9 15.9 +32 03		15.5		double system
9 16.0 +28 36		15.7		
9 16.1 +28 03		15.6		
9 16.5 +27 08		15.4		
9 16.6 +27 40		14.8		
9 17.0 +26 46		15.7		
9 17.0 +26 58		15.3		
9 17.0 +27 00		15.7		
9 17.1 +27 16		15.7		
9 17.5 +30 23		15.6		compact
9 17.6 +26 45		15.6		
9 17.8 +26 52		15.7		
9 17.9 +28 21		15.4		
9 17.9 +29 05		15.7		
9 17.9 +30 20		15.7		
9 18.1 +29 09		15.6		double system
9 18.3 +26 55		15.6		
9 19.9 +29 32		15.7		very diffuse spiral
9 20.2 +27 01		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 21.4 + 28 30		14.8		
9 21.8 + 29 01		15.6		
9 21.9 + 26 59	2862	13.8		
9 22.3 + 29 41		15.7		
9 22.6 + 27 34		15.6		
9 23.5 + 26 47		15.7		
9 23.7 + 26 48		15.7		
9 24.1 + 29 36		15.7		
9 24.4 + 30 39	2473*	14.6		
9 24.5 + 30 12		15.6		
9 24.5 + 30 15		15.7		
9 24.7 + 29 01		15.7		extremely diffuse
9 24.9 + 30 13	2476*	14.5		
9 25.0 + 30 01	2475*	15.7		
9 25.0 + 30 16	2478*	15.6		compact
9 25.1 + 30 14	2479*	15.5		
9 25.2 + 26 37		15.6		
9 25.2 + 30 28		15.7		very diffuse
9 25.3 + 30 25		15.6		
9 25.4 + 26 38		15.5		compact
9 25.4 + 29 56	2480*	15.5		compact



FIELD No. 152

9^h38^m $+29^\circ30'$

Survey Plate No. 466

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
13128	9 28 22.6	+ 27 36 30	6.59
13182	9 30 22.8	+ 28 35 26	6.35
13265	9 33 45.2	+ 31 23 13	5.74
13406	9 40 37.7	+ 30 12 19	5.73
13524	9 46 50.7	+ 31 18 40	6.87
13579	9 49 33.9	+ 27 13 10	8.1

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0926.5 + 3026	open	371	10.5	Near	2
0928.0 + 2904	compact	118	1.0	ED	4
0929.5 + 2925	compact	222	2.3	VD	21
0932.2 + 3147	open	450	9.6	MD	20
0932.9 + 2719	open	165	1.9	VD	3
0935.5 + 2945	medium compact	426	6.2	D	19
0936.6 + 2847	medium compact	133	1.6	ED	18
0940.0 + 2958	medium compact	275	2.3	VD	17
0941.2 + 3051	medium compact	108	1.1	ED	15
0941.7 + 2430	open	770	33.6	Near	1
0941.8 + 2854	open	475	8.0	MD	10
0941.8 + 3018	compact	108	1.2	VD	16
0943.0 + 2955	open	156	3.4	MD	9
0946.1 + 3139	medium compact	136	3.0	D	14
0946.9 + 2936	medium compact	166	2.0	VD	7
0947.5 + 2908	medium compact	222	2.6	D	8
0949.0 + 3017	compact	68	0.8	ED	13
0949.2 + 2951	medium compact	122	1.0	ED	6
0951.2 + 2842	medium compact	187	1.4	VD	5
0951.6 + 3154	medium compact	89	2.1	VD	11
0951.7 + 3126	compact	70	0.8	ED	12

Average number of galaxies per cluster = 230.3

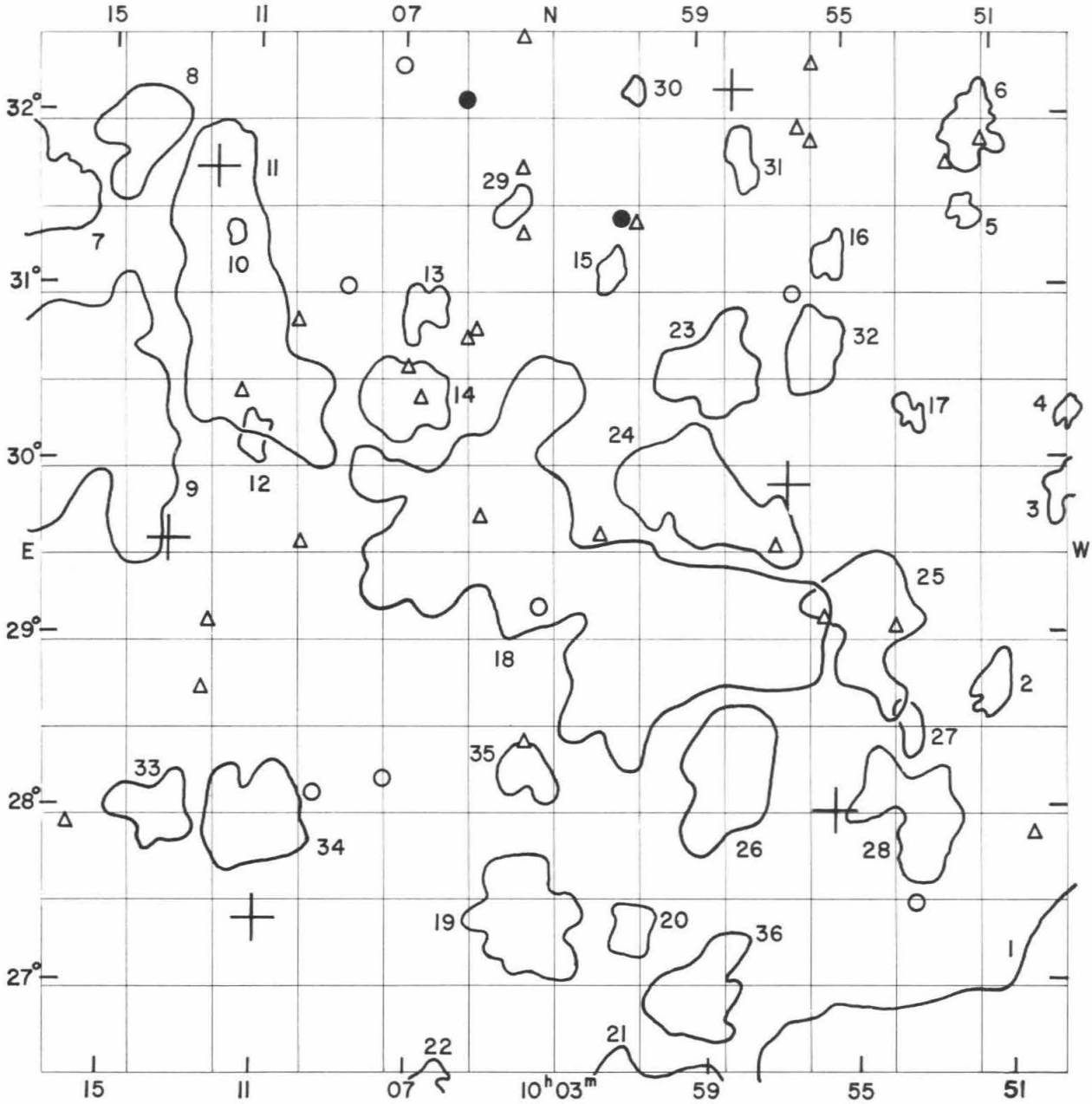
GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
9 24.4 + 30 39	2473*	14.6		
9 24.5 + 30 12		15.6		
9 24.5 + 30 15		15.7		
9 24.7 + 29 01		15.7		extremely diffuse
9 24.9 + 30 13	2476*	14.5		
9 25.0 + 30 01	2475*	15.7		
9 25.0 + 30 16	2478*	15.6		compact
9 25.1 + 30 14	2479*	15.5		
9 25.2 + 26 37		15.6		
9 25.2 + 30 28		15.7		very diffuse
9 25.3 + 30 25		15.6		
9 25.4 + 26 38		15.5		compact
9 25.4 + 29 56	2480*	15.5		compact
9 26.2 + 30 22		15.4		double nebula, collision
9 26.3 + 26 40		15.5		
9 26.3 + 30 37		15.7		
9 26.5 + 31 13	2483*	15.7		
9 27.3 + 29 46	2893	13.6		
9 27.3 + 30 40		15.6		
9 27.4 + 26 52	2486*	15.1		
9 27.6 + 28 00		15.2		double system
9 28.3 + 30 15		14.5		
9 28.6 + 26 42		15.7		double system
9 28.9 + 30 01		15.0		
9 30.0 + 27 44		15.0		
9 30.1 + 30 10	2490*	14.7		
9 30.3 + 27 50		15.5		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
9 30.9 +30 38		15.5		
9 31.1 +27 36		15.6		
9 31.7 +32 17		15.0		
9 32.5 +30 03		15.0		
9 32.8 +31 56	2918	13.6		
9 33.1 +26 54		15.7		
9 33.2 +29 20		15.4		
9 33.5 +32 02		15.5		
9 33.6 +28 21		15.7		
9 33.6 +28 44		15.6		
9 33.8 +31 18		15.4		
9 34.0 +31 34		15.5		
9 35.0 +30 10		15.5		
9 35.1 +27 54		15.5		
9 35.2 +28 17	2495*	14.8		
9 36.8 +28 27		15.4		
9 37.2 +31 54		15.7		
9 37.6 +29 13		15.6		
9 38.0 +27 10		15.6		
9 38.0 +28 00		15.5		multiple system
9 38.3 +32 23		15.5		
9 38.4 +28 20	2498*	15.3		
9 38.8 +28 50		15.7		
9 38.9 +27 53		15.3		
9 38.9 +31 44		15.7		
9 39.3 +27 04		15.7		
9 39.4 +31 12		15.6		
9 39.5 +29 11		15.6		
9 39.9 +32 05	2964	12.0	+ 1340	m_H = 11.9 Sc
9 40.0 +29 13		14.5		double system
9 40.2 +32 10	2968	13.1		m_H = 12.8 I
9 40.6 +32 13	2970	14.7		
9 40.8 +26 35		15.6		
9 40.9 +30 47		15.7		
9 42.0 +31 20	2981	15.0		
9 42.1 +29 41	558*	14.9		
9 42.2 +27 30	2505*	15.7		
9 42.3 +27 29	2506*	15.6		
9 42.4 +30 55		15.7		
9 42.8 +30 29		15.6		
9 43.6 +30 53		14.9		
9 46.7 +32 27	3011	14.2		
9 47.1 +31 58		15.3		compact
9 47.2 +28 15		15.3		
9 47.4 +31 43		14.7		
9 47.8 +30 44		15.1		
9 48.0 +28 47	3026	13.8		
9 48.1 +30 49		15.1		double system with bridge
9 48.2 +26 32		15.5		double system
9 49.2 +29 28	3032	13.0	+ 1568	m_H = 12.8 S:
9 50.2 +27 51		15.7		
9 51.2 +31 51		15.4		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
2964	-	-	12.07	Sc	12.1	Sc	11.89	Sc-
2968	-	-	-	-	-	-	12.79	Ir. II
3032	-	-	12.89	S0	12.8	S0	-	-



FIELD No. 153

10^h03^m $+29^o30'$

Survey Plate No. 1396

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
13725	9 55 34.7	+ 27 59 55	6.42
13742	9 56 43.5	+ 29 53 08	5.86
13763	9 58 08.0	+ 32 10 13	5.60
14037	10 11 00.5	+ 27 23 03	6.10
14068	10 12 14.4	+ 31 43 01	6.56
14086	10 13 24.3	+ 29 33 37	5.35

CLUSTERS OF GALAXIES

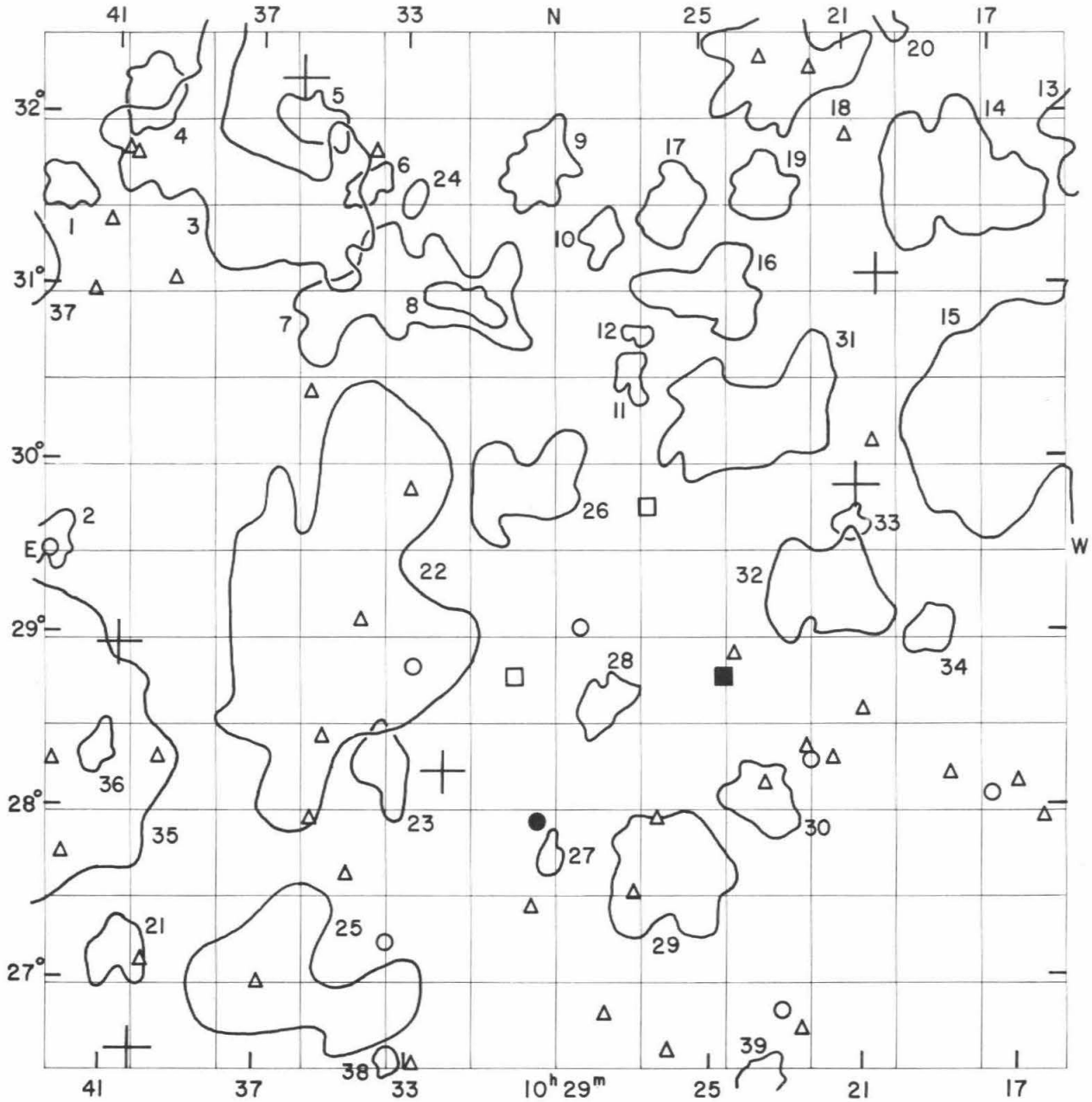
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
0941.7 + 2430	open	770	33.6	Near	1
0949.0 + 3017	compact	68	0.8	ED	4
0949.2 + 2951	medium compact	122	1.0	ED	3
0951.2 + 2842	medium compact	187	1.4	VD	2
0951.6 + 3154	medium compact	89	2.1	VD	6
0951.7 + 3126	compact	70	0.8	ED	5
0953.4 + 3017	medium compact	74	0.8	ED	17
0953.5 + 2800	medium compact	120	3.5	D	28
0953.5 + 2829	medium compact	70	1.2	VD	27
0954.5 + 2906	open	140	3.7	D	25
0955.5 + 3112	compact	91	1.2	ED	16
0955.9 + 3038	open	107	2.2	VD	32
0957.8 + 3146	medium compact	76	1.3	ED	31
0958.3 + 2813	compact	125	3.6	D	26
0958.7 + 3033	open	123	2.8	VD	23
0958.9 + 2950	open	196	3.8	D	24
0959.2 + 2656	open	125	3.2	D	36
1000.7 + 3210	compact	42	0.7	ED	30
1001.0 + 2720	medium compact	89	1.5	ED	20
1001.4 + 3107	compact	77	1.1	ED	15
1002.0 + 2919	open	562	9.9	MD	18
1002.2 + 2606	medium compact	437	6.3	MD	21
1003.7 + 2725	medium compact	236	3.5	ED	19
1003.7 + 2815	medium compact	79	1.7	VD	35
1004.0 + 3130	medium compact	64	1.1	ED	29
1006.4 + 2625	compact	94	1.2	ED	22
1006.5 + 3054	medium compact	112	1.4	ED	13
1007.0 + 3024	medium compact	109	2.5	VD	14
1011.0 + 2759	open	116	3.3	D	34
1011.0 + 3009	medium compact	69	1.2	ED	12
1011.4 + 3052	open	276	6.3	D	11
1011.6 + 3119	compact	46	0.6	ED	10
1013.5 + 2800	medium compact	64	2.1	VD	33
1014.0 + 3155	medium compact	136	2.8	VD	8
1016.0 + 3015	open	354	7.4	MD	9
1018.0 + 3140	medium compact	230	4.6	D	7

Average number of galaxies per cluster = 159.6

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
9 50.2	+ 27 51		15.7		
9 51.2	+ 31 51		15.4		
9 52.2	+ 31 44		15.3		
9 53.5	+ 27 28	2520*	14.3		
9 53.8	+ 29 04		15.2		system with jets
9 55.7	+ 29 07	3068	15.1		double system
9 55.8	+ 32 18		15.5		
9 55.9	+ 31 51	3071	15.4		
9 56.3	+ 31 57		15.5		very compact
9 56.4	+ 30 59		14.6		resolved dwarf system
9 57.0	+ 29 32		15.7		compact
10 00.7	+ 31 24		15.7		compact

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
10 01.1 +31 25	3106	14.0		
10 01.7 +29 37		15.2		
10 03.4 +29 12		14.6		
10 03.8 +28 25		15.4		
10 03.8 +31 20	3116	15.3		compact
10 03.8 +31 43	2540*	15.2		
10 03.8 +32 29		15.5		
10 05.0 +29 43		15.4		
10 05.0 +30 47		15.4		
10 05.3 +30 45		15.7		
10 05.4 +32 06	3126	13.5		
10 06.6 +30 24		15.5		very diffuse
10 06.9 +30 34		15.1		
10 07.1 +32 19		14.9		
10 07.6 +28 12	2550*	14.6		
10 08.6 +31 02		15.0		
10 09.4 +28 07		14.3		
10 09.8 +29 34		15.7		
10 09.9 +30 50		15.3		
10 11.4 +30 26		15.6		diffuse
10 12.2 +29 06		15.6		
10 12.4 +28 43		15.7		
10 16.0 +27 56	3196	15.7		



FIELD No. 154

10^h29^m $+29°30'$

Survey Plate No. 1387

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ' "	
14249	10 20 11.1	+ 31 05 26	7.57
14266	10 20 52.3	+ 29 52 10	6.46
14530	10 32 02.6	+ 28 13 18	6.85
14624	10 35 54.7	+ 32 14 11	4.77
14730	10 40 17.4	+ 26 35 19	5.55
14742	10 40 44.1	+ 28 56 59	8.1

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1014.0 + 3155	medium compact	136	2.8	VD	13
1016.0 + 3015	open	354	7.4	MD	15
1018.0 + 3140	medium compact	230	4.6	D	14
1019.0 + 2901	compact	119	1.6	ED	34
1019.8 + 3233	compact	93	1.0	ED	20
1021.0 + 2938	compact	68	1.0	ED	33
1021.7 + 2916	open	144	3.5	VD	32
1022.7 + 3218	open	224	3.9	VD	18
1023.3 + 3135	medium compact	105	2.0	ED	19
1023.5 + 2803	medium compact	72	2.2	VD	30
1023.6 + 2624	compact	134	1.5	ED	39
1023.7 + 3014	open	193	4.6	D	31
1024.8 + 3100	medium compact	146	3.3	D	16
1025.9 + 3128	open	97	2.1	VD	17
1026.0 + 2738	medium compact	154	4.0	MD	29
1026.7 + 3045	compact	54	0.7	ED	12
1027.0 + 3030	medium compact	67	1.2	VD	11
1027.7 + 2836	medium compact	67	1.7	ED	28
1027.8 + 3117	medium compact	73	1.5	VD	10
1029.1 + 2744	compact	75	1.0	ED	27
1029.4 + 3143	medium compact	155	2.3	ED	9
1029.7 + 2953	open	108	3.3	VD	26
1031.5 + 3056	medium compact	72	1.6	VD	8
1032.9 + 3131	compact	80	0.9	VD	24
1033.0 + 3100	medium compact	145	4.7	D	7
1033.5 + 2632	compact	99	0.8	ED	38
1033.6 + 2815	medium compact	111	2.0	VD	23
1034.1 + 3135	compact	93	1.3	ED	6
1034.9 + 2912	open	209	9.2	Near	22
1035.7 + 3157	medium compact	125	1.8	ED	5
1036.0 + 2659	open	210	5.3	MD	25
1037.3 + 3134	open	207	6.3	MD	3
1040.1 + 3206	medium compact	150	2.2	ED	4
1040.6 + 2709	medium compact	120	1.9	ED	21
1041.2 + 2818	compact	78	1.2	ED	36
1042.4 + 3132	open	106	1.6	ED	1
1042.6 + 2930	medium compact	94	1.6	ED	2
1045.8 + 3155	medium compact	481	7.6	MD	37
1046.8 + 2747	open	412	15.4	Near	35

Average number of galaxies per cluster = 145.1

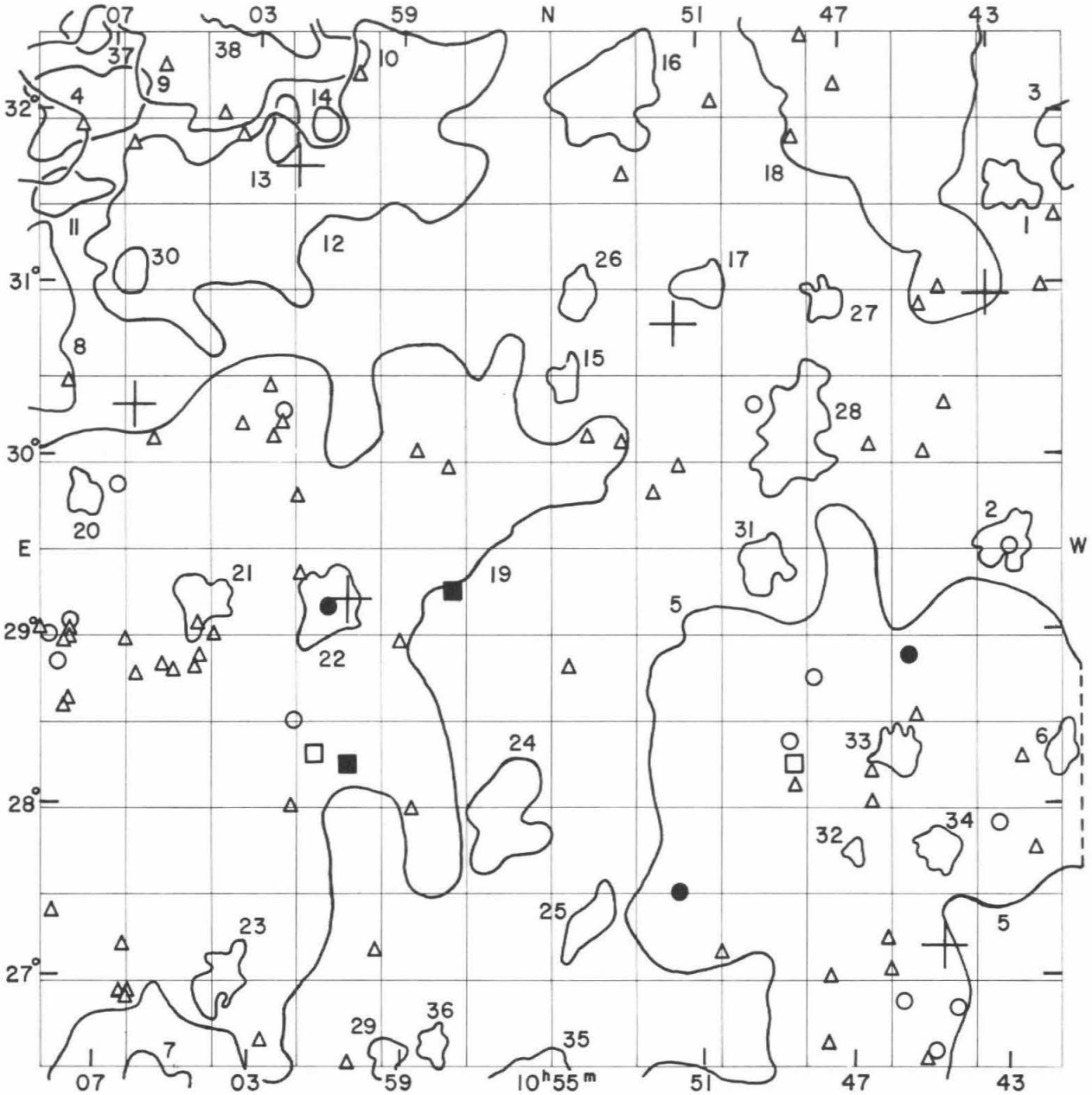
GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
10 16.0 + 27 56	3196	15.7		
10 16.7 + 28 09		15.7		
10 17.4 + 28 05	3204	14.8		
10 18.5 + 28 11	2565*	15.2		double nebula
10 20.4 + 30 07		15.6		
10 20.8 + 28 35		15.7		diffuse spiral
10 21.0 + 31 54		15.7		
10 21.5 + 28 17	3232	15.4		
10 22.0 + 32 17		15.7		

Position α 1950 h m	δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
10 22.1	+ 28 17	3235	14.7		
10 22.2	+ 28 21	2572*	15.6		
10 22.6	+ 26 43		15.5		
10 23.0	+ 26 50		14.6		
10 23.4	+ 28 09		15.7		
10 23.4	+ 32 22		15.2		compact
10 24.2	+ 28 54		15.4		
10 24.5	+ 28 46	3245	11.6	+ 1261	m_H = 12.0 Sa
10 26.1	+ 26 36		15.4		
10 26.3	+ 27 58		15.7		triple system
10 26.5	+ 29 45	3254	12.4	+ 1228	m_H = 12.6 Sc
10 26.9	+ 27 31		15.6		diffuse spiral
10 27.7	+ 26 49		15.7		
10 28.2	+ 29 04	3265	14.1		
10 29.5	+ 27 56	3274	13.3		m_H = 13.0
10 29.7	+ 27 26		15.5		
10 30.1	+ 28 47	3277	12.3	+ 1460	m_H = 12.6 Sb
10 32.8	+ 26 32		15.6		double system
10 32.8	+ 28 50		14.2		
10 32.9	+ 29 52		15.7		compact
10 33.5	+ 27 14	2590*	14.7		
10 33.9	+ 31 49		15.6		
10 34.2	+ 29 06		15.7		
10 34.6	+ 27 37		15.5		quadruple system
10 35.2	+ 28 25		15.7		
10 35.5	+ 27 57		15.6		double system
10 35.6	+ 30 25		15.6		
10 36.9	+ 27 00	2598*	15.1		
10 39.4	+ 31 03		15.5		
10 39.6	+ 28 17		15.5		
10 40.0	+ 27 06		15.3		
10 40.5	+ 31 47		15.5		triple nebula
10 40.7	+ 31 48		15.7		
10 41.1	+ 31 23		15.6		
10 41.6	+ 30 59	3350	15.4		
10 42.1	+ 27 44		15.4		
10 42.4	+ 28 15		15.7		
10 42.6	+ 29 28		14.9		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3245	-	-	11.75	S0	11.8	S0	-	-
3254	-	-	12.26	Sc	12.1	Sb	-	-
3277	-	-	12.28	Sa	12.4	Sa	-	-



FIELD No. 155

10^h55^m $+29^o30'$

Survey Plate No. 1357

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
14798	10 43 05.3	+ 30 56 46	5.37
14843	10 44 38.3	+ 27 10 29	7.32
14989	10 51 40.1	+ 30 47 55	7.42
15181	11 00 28.4	+ 29 11 58	7.29
15223	11 01 55.3	+ 31 42 23	7.32
15326	11 06 20.1	+ 30 18 42	7.18

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1037.3 + 3134	open	207	6.3	MD	3
1041.2 + 2818	compact	78	1.2	ED	6
1042.4 + 3132	open	106	1.6	ED	1
1042.6 + 2930	medium compact	94	1.6	ED	2
1044.7 + 2745	compact	102	1.3	ED	34
1045.7 + 2820	medium compact	107	1.4	ED	33
1045.8 + 3155	medium compact	481	7.6	MD	18
1046.8 + 2747	open	412	15.4	Near	5
1046.9 + 2744	compact	54	0.6	ED	32
1047.4 + 3055	compact	97	1.2	ED	27
1048.3 + 3010	medium compact	197	3.1	D	28
1049.2 + 2925	medium compact	121	1.6	ED	31
1050.8 + 3101	medium compact	115	1.4	ED	17
1053.2 + 3208	open	155	3.3	D	16
1054.0 + 2721	medium compact	90	1.6	VD	25
1054.1 + 3059	medium compact	82	1.3	VD	26
1054.6 + 3029	medium compact	100	1.1	ED	15
1055.5 + 2606	open	356	4.9	D	35
1056.3 + 2759	medium compact	136	2.9	D	24
1058.1 + 2638	medium compact	61	1.1	D	36
1059.3 + 2634	medium compact	96	1.2	VD	29
1101.0 + 2912	medium compact	98	2.1	VD	22
1101.1 + 3158	medium compact	81	0.9	ED	14
1102.1 + 3136	medium compact	281	8.8	Near	12
1102.3 + 3155	medium compact	104	1.4	ED	13
1103.0 + 3239	open	146	3.3	VD	38
1103.7 + 2700	medium compact	150	1.7	VD	23
1104.3 + 2911	medium compact	130	1.7	VD	21
1105.3 + 2835	medium compact	1090	21.0	Near	19
1105.5 + 3257	medium compact	885	10.9	MD	10
1106.1 + 2551	medium compact	442	4.6	MD	7
1106.5 + 3105	medium compact	52	1.2	VD	30
1107.5 + 2947	open	86	1.1	VD	20
1107.7 + 3203	medium compact	209	3.3	VD	9
1107.8 + 3230	medium compact	88	1.6	VD	37
1108.3 + 3132	medium compact	98	1.7	D	11
1110.1 + 3049	medium compact	569	5.7	MD	8
1115.2 + 3013	medium compact	950	15.5	Near	4

Average number of galaxies per cluster = 229.1

GALAXIES

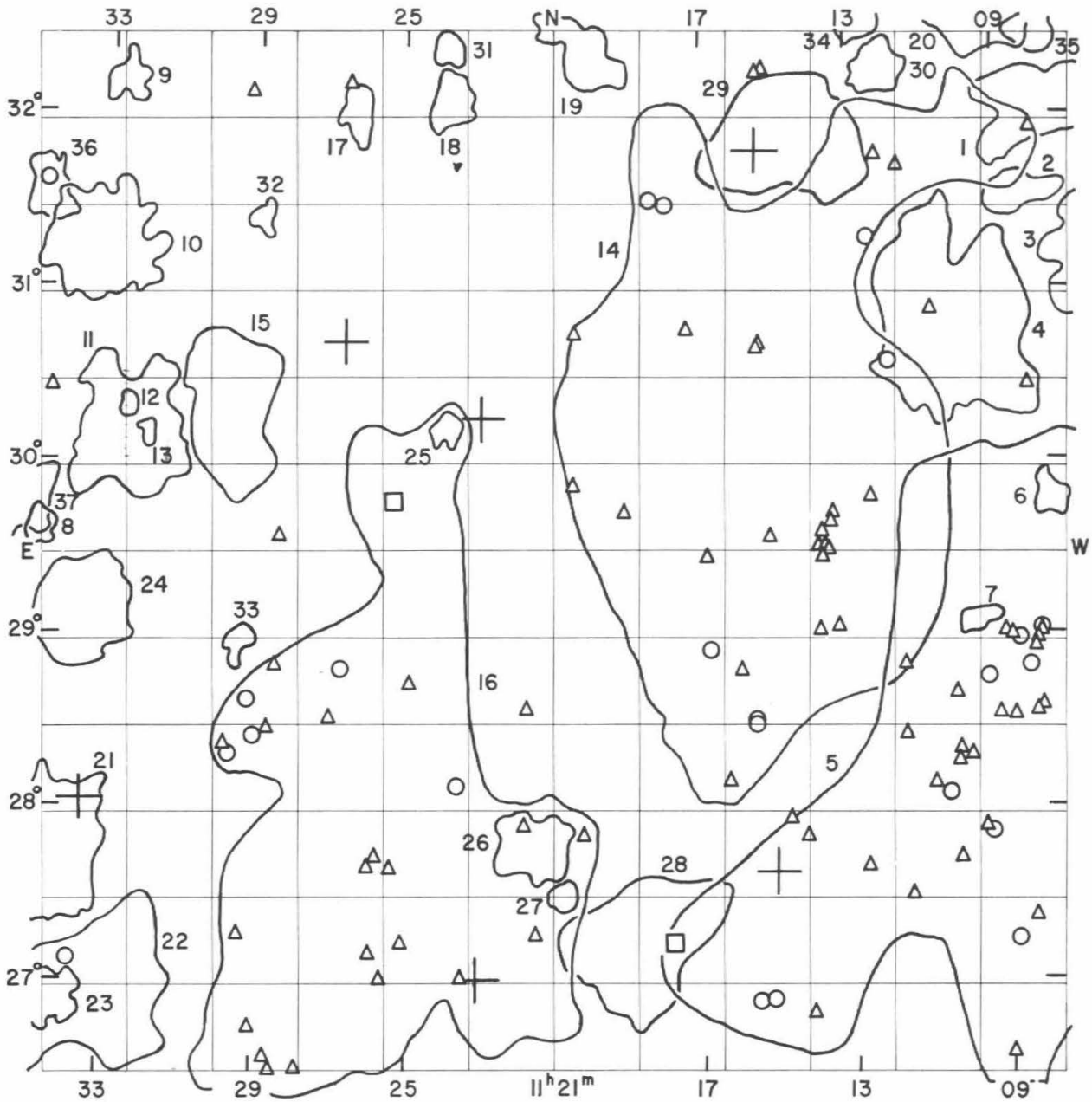
Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
10 41.1 + 31 23		15.6		
10 41.6 + 30 59	3350	15.4		
10 42.1 + 27 44		15.4		
10 42.4 + 28 15		15.7		
10 42.6 + 29 28		14.9		
10 43.0 + 27 53		15.0		
10 44.3 + 26 48		14.4		
10 44.3 + 30 19		15.5		
10 44.4 + 31 00		15.6		
10 44.9 + 26 33		14.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
10 44.9 +30 02		15.7		
10 44.9 +30 53		15.7		
10 45.1 +26 31		15.4		
10 45.2 +28 31		15.1		
10 45.5 +28 53	3380	13.6		
10 45.7 +26 51		14.5		
10 46.0 +27 02		15.4		
10 46.1 +27 13		15..7		
10 46.4 +28 01		15.6		
10 46.4 +28 11		15.3		
10 46.4 +30 05		15.6		triple system
10 47.1 +32 10		15.7		extremely diffuse spiral
10 47.6 +27 00		15.3		
10 47.7 +26 37		15.6		
10 48.0 +28 44	3400	14.3		
10 48.0 +32 28		15.7		double nebula
10 48.4 +31 52		15.7		
10 48.5 +28 07		15.6		
10 48.5 +28 15	3414	12.1	+ 1449	m_H = 12.2 SBb
10 48.6 +28 23	3418	14.5		
10 49.5 +30 20		14.6		double system, one-armed spiral
10 50.4 +27 09		15.1		
10 50.6 +32 05		15.5		compact
10 51.5 +29 58		15.7		
10 51.6 +27 30	3451	13.5		
10 52.2 +29 48		15.7		
10 53.0 +30 06		15.7		
10 53.0 +31 40		15.7		
10 53.9 +30 08		15.7		
10 54.5 +28 49		15.3		
10 57.6 +29 15	3486	11.2	+ 1116	m_H = 11.4 Sc
10 57.7 +29 58		15.2		
10 58.6 +30 04		15.6		
10 58.7 +28 00	3493	15.3		
10 59.0 +28 58		15.6		very diffuse
10 59.7 +27 11		15.7		diffuse
11 00.3 +32 14		15.2		double system
11 00.4 +26 31		15.6		very compact
11 00.4 +28 15	3504	11.5	+ 1513	m_H = 11.7 SBb
11 00.9 +29 10	3510	13.6	+ 719	m_H = 12.8 S
11 01.3 +28 18	3512	12.9	+ 1502	m_H = 12.8 Sc
11 01.7 +29 20		15.7		
11 01.8 +29 47		15.5		
11 01.9 +28 00		15.7		extremely diffuse
11 01.9 +28 30	3515	14.8		
11 02.2 +30 18		14.7		
11 02.3 +30 13		15.6		
11 02.5 +30 08		15.7		
11 02.6 +30 25		15.7		
11 02.7 +26 39		15.3		
11 03.3 +30 12		15.3		
11 03.4 +31 53		15.6		
11 04.0 +28 59		15.1		double system
11 04.0 +32 00		15.6		
11 04.3 +28 52		15.5		
11 04.5 +28 48	3527	15.1		
11 04.5 +29 03		15.6		
11 05.1 +28 46		15.6		
11 05.5 +28 48		15.7		compact

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 05.6	+32 17		15.5		double system
11 05.7	+30 06		15.4		
11 06.1	+26 54	3534	15.4		
11 06.1	+28 45	3536	15.2		
11 06.2	+26 53		15.6		
11 06.3	+27 11	2626*	15.7		
11 06.4	+26 54		15.6		
11 06.4	+28 56	3539	15.4		
11 06.5	+31 49		15.7		diffuse spiral
11 06.6	+29 50		15.0		
11 07.9	+28 35		15.1		
11 07.9	+29 00		15.5		very compact
11 07.9	+29 02	3550	14.2		double nucleus
11 07.9	+31 56		15.1		
11 08.0	+28 33		15.7		
11 08.0	+28 58	3552+3553	15.1		triple system
11 08.1	+28 56	3554	15.3		compact
11 08.1	+30 26		15.7		double nebula
11 08.2	+27 22		15.5		
11 08.2	+28 49	3558	14.8		compact
11 08.5	+28 58	3561	14.7		double system, bridge + jets
11 08.7	+29 00		15.5		

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3414	12.1	SBb	12.11	SBa	12.0	SB0	-	-
3486	11.2	Sc	10.95	Sc	10.7	Sc	11.00	Sc-
3504	-	-	11.58	SBb	11.6	SBb	-	-
3510	-	-	-	-	-	SBc	-	-
3512	-	-	13.00	Sc	12.9	Sc	-	-



FIELD No. 156

11^h21^m $+29°30'$

Survey Plate No. 99

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
15528	11 15 04.0	+ 27 38 08	6.80
15537	11 15 31.2	+ 31 48 39	Var.
15676	11 22 58.6	+ 30 15 43	6.88
15682	11 23 06.9	+ 27 01 20	7.15
15755	11 26 39.4	+ 30 42 08	7.10
15905	11 33 40.3	+ 28 03 27	5.82

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1102.1 + 3136	medium compact	281	8.8	Near	3
1105.3 + 2835	medium compact	1090	21.0	Near	5
1105.5 + 3257	medium compact	885	10.9	MD	20
1107.5 + 2947	open	86	1.1	VD	6
1107.7 + 3203	medium compact	209	3.3	VD	1
1107.8 + 3230	medium compact	88	1.6	VD	35
1108.3 + 3132	medium compact	98	1.7	D	2
1109.5 + 2906	medium compact	77	1.0	ED	7
1110.1 + 3049	medium compact	569	5.7	MD	4
1112.0 + 3217	medium compact	78	1.6	D	30
1112.5 + 3233	open	55	1.1	VD	34
1114.5 + 3154	medium compact	164	4.4	MD	29
1115.2 + 3013	medium compact	950	15.5	Near	14
1118.6 + 2714	medium compact	240	4.6	MD	28
1120.1 + 3222	medium compact	233	2.2	D	19
1120.8 + 2730	compact	95	0.7	ED	27
1121.5 + 2747	medium compact	129	2.3	D	26
1123.7 + 3205	medium compact	188	1.6	ED	18
1123.8 + 3224	medium compact	94	0.9	VD	31
1123.9 + 3011	medium compact	106	1.0	ED	25
1125.5 + 2759	open	673	13.7	Near	16
1126.3 + 3200	compact	126	1.4	ED	17
1128.9 + 3124	medium compact	67	0.8	ED	32
1129.4 + 2858	open	68	1.0	VD	33
1129.6 + 3018	medium compact	129	3.8	MD	15
1131.9 + 3009	compact	48	0.5	ED	13
1132.4 + 3010	medium compact	318	4.0	D	11
1132.6 + 3019	compact	60	0.5	ED	12
1132.7 + 3211	compact	180	1.4	VD	9
1133.2 + 2655	medium compact	346	5.1	MD	22
1133.2 + 3116	medium compact	255	3.6	D	10
1133.6 + 2909	open	138	3.2	D	24
1134.3 + 2654	compact	150	1.6	VD	23
1134.9 + 2937	compact	84	1.1	ED	8
1134.9 + 3133	medium compact	113	1.7	VD	36
1135.0 + 2745	medium compact	278	4.9	MD	21
1136.6 + 2949	open	150	3.9	D	37

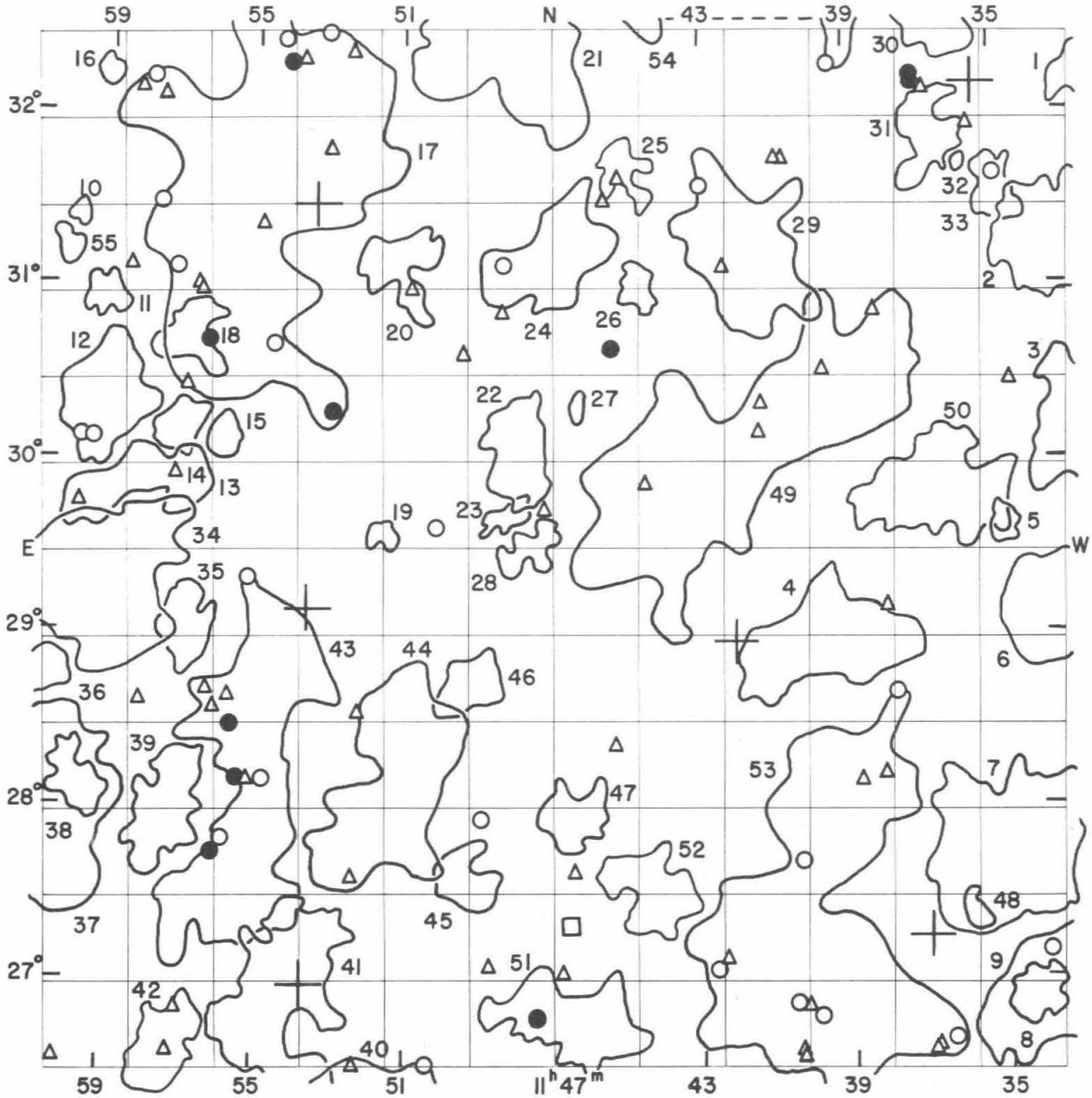
Average number of galaxies per cluster = 240.5

GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
11 07.9 + 28 35		15.1		
11 07.9 + 29 00		15.5		very compact
11 07.9 + 29 02	3550	14.2		double nucleus
11 07.9 + 31 56		15.1		
11 08.0 + 28 33		15.7		
11 08.0 + 28 58	3552+3553	15.1		triple system
11 08.1 + 28 56	3554	15.3		compact
11 08.1 + 30 26		15.7		double nebula
11 08.2 + 27 22		15.5		
11 08.2 + 28 49	3558	14.8		compact
11 08.5 + 28 58	3561	14.7		double system, bridge + jets

Position α 1950 δ			NGC IC*	m_p	V_s km/sec	Remarks
h	m	o '				
11	08.6	+ 28 32		15.6		
11	08.7	+ 29 00		15.5		
11	08.8	+ 27 14	3563	14.6		double nebula
11	08.9	+ 29 01		15.7		
11	09.0	+ 26 35		15.7		double system
11	09.1	+ 28 33		15.6		
11	09.4	+ 27 51	3570	15.0		
11	09.4	+ 28 45		14.9		
11	09.5	+ 27 53	3574	15.7		
11	09.8	+ 28 18		15.7		double system, bridge
11	10.1	+ 28 20		15.7		diffuse
11	10.2	+ 27 43		15.1		
11	10.2	+ 28 16		15.5		
11	10.2	+ 28 40		15.7		
11	10.5	+ 28 05		14.7		
11	10.7	+ 30 52		15.1		
11	10.8	+ 28 09		15.7		
11	11.5	+ 27 30		15.5		
11	11.6	+ 28 25		15.6		
11	11.6	+ 28 49		15.3		compact
11	11.6	+ 31 44		15.5		
11	11.9	+ 30 35		14.6		
11	12.2	+ 31 47		15.3		
11	12.4	+ 29 48		15.5		
11	12.4	+ 31 18		14.4		
11	12.6	+ 27 40		15.2		
11	13.3	+ 29 04		15.6		
11	13.4	+ 29 43		15.4		
11	13.5	+ 29 30		15.5		
11	13.5	+ 29 40		15.3		
11	13.6	+ 29 31		15.2		
11	13.7	+ 29 27		15.2		double system
11	13.7	+ 29 36		15.2		
11	13.8	+ 29 02		15.2		double system
11	13.9	+ 29 31		15.1		double system in halo
11	14.1	+ 26 49		15.4		
11	14.2	+ 27 51		15.7		
11	14.7	+ 27 57		15.7		
11	15.2	+ 26 54	3609	14.1		
11	15.2	+ 29 35		15.6		
11	15.2	+ 32 16		15.7		
11	15.4	+ 30 41		15.1		double nebula
11	15.5	+ 30 40		15.2		
11	15.5	+ 32 15		15.7		
11	15.6	+ 26 54	3612	15.0		
11	15.6	+ 28 30		14.8		
11	15.6	+ 28 33		14.7		
11	16.0	+ 28 48		15.5		compact
11	16.2	+ 28 10		15.7		
11	16.8	+ 28 56		14.4		
11	16.9	+ 29 27		15.6		
11	17.4	+ 30 46		15.2		
11	17.9	+ 27 15	3629	12.9		m_H = 12.9 S
11	18.0	+ 31 30		14.8		
11	18.4	+ 31 31		15.0		
11	19.0	+ 29 43		15.5		
11	20.1	+ 27 52		15.2		
11	20.4	+ 30 45		15.2		
11	20.5	+ 29 53		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
11 21.5 +27 18		15.3		
11 21.7 +28 35		15.7		
11 21.8 +27 55		15.2		
11 23.5 +27 02		15.5		
11 23.6 +28 09	3678	14.2		
11 24.9 +28 44		15.7		
11 25.1 +27 15		15.7		
11 25.3 +29 47	3687	13.0		m_H = 13.0
11 25.4 +27 40		15.1		
11 25.7 +27 02		15.6		
11 25.8 +27 44		15.1		double system
11 25.9 +27 11		15.3		
11 26.0 +27 41		15.3		
11 26.5 +32 11		15.7		diffuse spiral
11 26.7 +28 49		14.8		
11 27.0 +28 32		15.4		
11 27.8 +26 30		15.7		
11 28.4 +29 34		15.5		
11 28.5 +26 30		15.5		
11 28.5 +28 50		15.7		
11 28.6 +26 35		15.5		
11 28.6 +28 28		15.2		
11 29.0 +26 45		15.7		
11 29.0 +28 25	3713	14.4		
11 29.2 +28 38	3714	14.3		
11 29.2 +32 09		15.4		diffuse spiral
11 29.3 +27 17		15.4		
11 29.7 +28 19		15.0		
11 29.8 +28 23		15.7		
11 33.8 +27 09		14.9		
11 34.6 +30 26		15.4		
11 34.9 +31 38	2947*	14.6		



FIELD No. 157

11^h47^m $+29^\circ30'$

Survey Plate No. 1379

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
15956	11 35 27.7	+ 32 09 29	7.13
16002	11 37 00.8	+ 27 14 01	8.2
16110	11 42 07.6	+ 28 56 51	6.98
16317	11 53 26.4	+ 31 28 50	9.0
16323	11 53 40.8	+ 29 08 11	7.46
16325	11 53 46.6	+ 26 57 26	6.87

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1132.4 + 3010	medium compact	318	4.0	D	3
1132.7 + 3211	compact	180	1.4	VD	1
1133.2 + 2655	medium compact	346	5.1	MD	9
1133.2 + 3116	medium compact	255	3.6	D	2
1133.6 + 2909	open	138	3.2	D	6
1134.3 + 2654	compact	150	1.6	VD	8
1134.8 + 3310	medium compact	576	6.6	MD	30
1134.9 + 2937	compact	84	1.1	ED	5
1134.9 + 3133	medium compact	113	1.7	VD	33
1135.0 + 2745	medium compact	278	4.9	MD	7
1135.9 + 2723	compact	99	1.0	ED	48
1135.9 + 3143	compact	47	0.5	ED	32
1136.6 + 2949	open	150	3.9	D	50
1136.6 + 3154	open	107	2.2	D	31
1139.6 + 2859	medium compact	156	4.2	D	4
1140.0 + 2715	open	247	8.2	Near	53
1141.7 + 3113	medium compact	159	4.5	Near	29
1141.9 + 3004	open	214	7.8	Near	49
1142.2 + 3456	medium compact	470	19.4	Near	54
1144.3 + 2731	medium compact	106	2.6	D	52
1144.7 + 3100	compact	102	1.3	ED	26
1145.0 + 3142	medium compact	131	1.7	VD	25
1146.4 + 3018	compact	56	0.7	ED	27
1146.5 + 2645	open	137	3.5	MD	51
1146.5 + 2756	medium compact	136	2.0	VD	47
1147.0 + 3110	open	181	3.3	MD	24
1147.6 + 2930	medium compact	98	1.7	VD	28
1148.0 + 3003	open	130	2.4	D	22
1148.2 + 2940	medium compact	94	1.2	ED	23
1148.2 + 3225	open	253	4.9	MD	21
1149.2 + 2843	compact	179	1.9	VD	46
1149.4 + 2734	open	110	1.9	VD	45
1151.1 + 2809	medium compact	286	5.1	MD	44
1151.1 + 3106	open	119	2.1	D	20
1151.6 + 2934	compact	83	0.8	ED	19
1153.0 + 2522	medium compact	330	12.5	Near	40
1154.3 + 2645	medium compact	434	4.7	MD	41
1154.9 + 2806	open	209	6.3	Near	43
1155.0 + 3127	medium compact	209	8.6	Near	17
1155.9 + 3007	compact	89	1.2	ED	15
1156.8 + 3043	open	105	1.8	VD	18
1156.9 + 2902	medium compact	178	2.0	ED	35
1157.1 + 3010	medium compact	100	1.7	VD	14
1157.3 + 2635	open	221	2.5	VD	42
1157.3 + 2758	medium compact	222	2.7	D	39
1158.4 + 2954	medium compact	229	3.1	D	13
1159.1 + 2916	open	362	5.1	MD	34
1159.2 + 3021	medium compact	267	3.2	MD	12
1159.3 + 3057	open	81	1.3	VD	11
1159.4 + 3216	compact	59	0.7	ED	16
1159.8 + 2808	compact	184	1.9	ED	38
1200.0 + 3125	medium compact	51	0.6	ED	10
1200.4 + 3115	medium compact	70	1.0	ED	55
1200.5 + 2809	medium compact	406	5.3	MD	37
1200.7 + 2846	medium compact	155	1.5	D	36

Average number of galaxies per cluster = 186.3

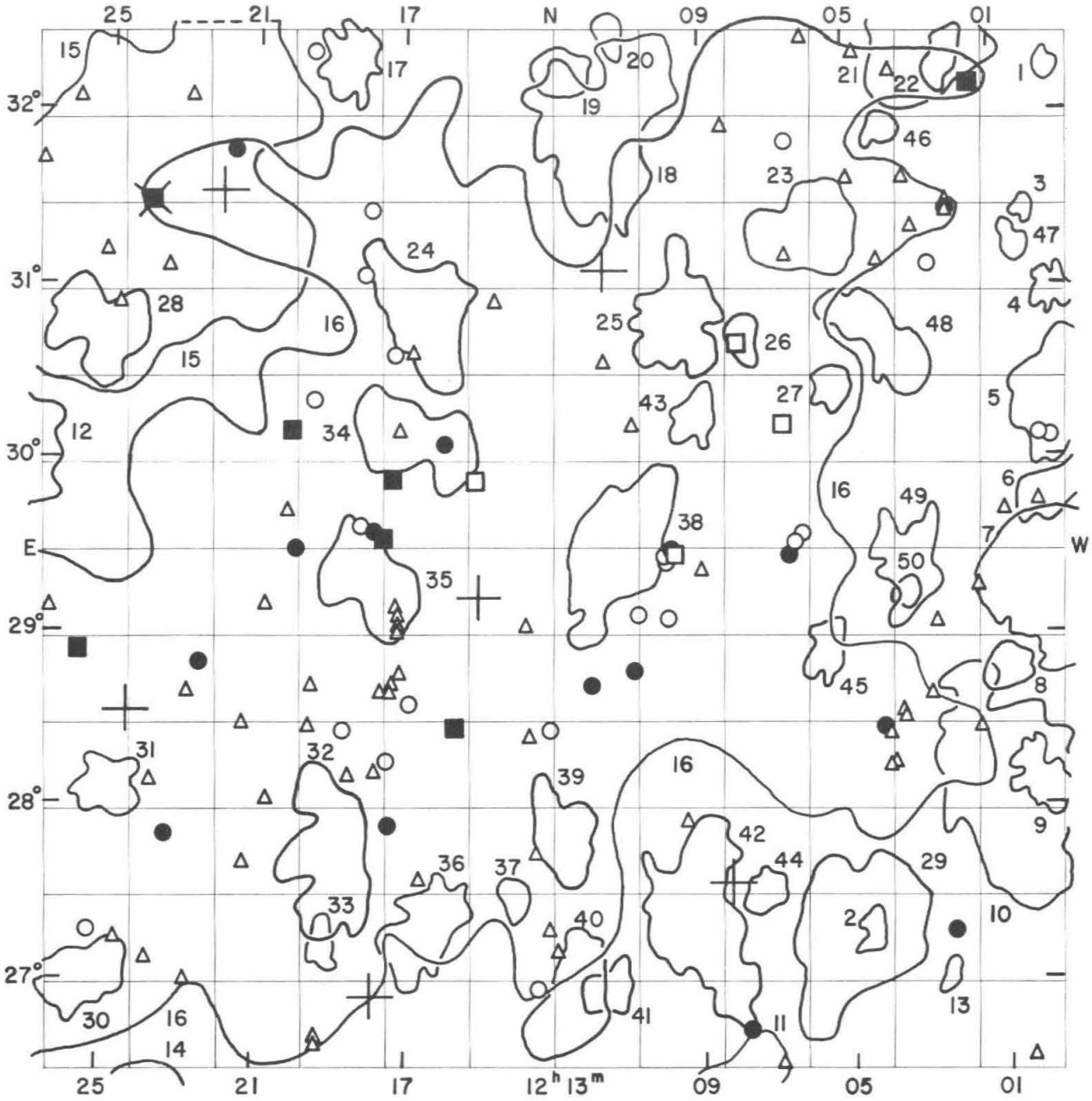
GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
11 33.8	+ 27 09		14.9		
11 34.6	+ 30 26		15.4		
11 34.9	+ 31 38	2947*	14.6		
11 35.6	+ 31 56		15.5		
11 36.4	+ 26 38	3781	14.8		
11 36.8	+ 26 36	3784	15.2		
11 36.8	+ 32 09		15.7		
11 36.9	+ 26 35	3785	15.3		
11 37.0	+ 32 11	3786	13.5		
11 37.1	+ 32 13	3788	13.2		
11 37.8	+ 28 40		14.5		
11 38.0	+ 29 09		15.1		
11 38.1	+ 28 11		15.7		diffuse
11 38.3	+ 30 52		15.6		
11 38.8	+ 28 08		15.1		
11 39.4	+ 32 17		15.0		
11 39.6	+ 30 31		15.5		
11 39.8	+ 26 46	3826	14.4		
11 40.2	+ 26 50		15.6		
11 40.3	+ 26 33		15.5		diffuse spiral
11 40.3	+ 26 34		15.1		double nebula
11 40.3	+ 27 41		14.9		
11 40.6	+ 26 51	3830	14.7		double system, 15.4 + 15.5
11 40.7	+ 31 45		15.5		very diffuse
11 40.9	+ 31 45		15.3		
11 41.4	+ 30 20		15.4		
11 41.5	+ 30 10		15.3		
11 42.4	+ 27 07		15.3		very compact
11 42.4	+ 31 07		15.5		
11 42.6	+ 27 03		14.9		
11 43.0	+ 31 35		15.0		
11 44.5	+ 29 52		15.2		
11 45.2	+ 28 21		15.6		
11 45.2	+ 31 38	2961*	15.5		
11 45.4	+ 30 39	3891	13.7		
11 45.6	+ 31 30		15.6		
11 46.4	+ 27 37		15.4		compact
11 46.5	+ 27 19	3900	12.5	+ 1702	m_H = 12.7 Sb
11 46.7	+ 27 01		15.2		
11 47.2	+ 29 43		15.7		
11 47.4	+ 26 45	3912	13.2		m_H = 13.0
11 48.3	+ 31 08	2967*	14.8		
11 48.4	+ 30 51		15.7		
11 48.7	+ 27 04		15.4		
11 48.9	+ 27 55		14.8		triple system
11 49.4	+ 30 36		15.4		
11 50.1	+ 29 37		14.9		
11 50.5	+ 26 30	3944	14.3		
11 50.9	+ 30 58	2971*	15.7		
11 52.2	+ 28 32	3964	15.2		
11 52.3	+ 26 30		15.3		diffuse spiral
11 52.4	+ 27 35		15.1		
11 52.5	+ 32 20		15.5		
11 53.0	+ 30 16	3971	13.9		
11 53.0	+ 31 48		15.7		extremely diffuse
11 53.1	+ 32 28	3966	14.7		
11 53.8	+ 32 18	2978*	15.4		

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
11 54.1	+32 17	3986	14.0		
11 54.3	+32 25		14.5		
11 54.5	+30 40		14.5		
11 54.8	+28 09	3988	14.7		compact
11 54.9	+31 21		15.5		
11 55.2	+28 08	2982*	15.2		
11 55.2	+29 19	3984	14.8		
11 55.4	+28 09	4004	14.0		
11 55.6	+28 28	4008	13.1		m_H = 12.9
11 55.7	+28 38		15.6		
11 55.8	+27 48		14.6		
11 56.1	+27 43	4016	13.5		
11 56.1	+28 34		15.2		
11 56.3	+28 40		15.3		compact
11 56.3	+30 41	4020	13.2		
11 56.5	+30 58	2984*	15.6		
11 56.6	+31 00	2985*	15.2		
11 57.0	+26 50		15.7		diffuse spiral
11 57.0	+30 26		15.3		
11 57.2	+26 35		15.4		
11 57.2	+29 55		15.5		
11 57.2	+31 06	2986*	15.0		
11 57.7	+31 29		14.8		
11 57.7	+32 05		15.3		
11 57.9	+32 13	4031	14.7		
11 58.1	+28 36		15.7		
11 58.2	+32 09		15.5		diffuse
11 58.5	+31 06		15.7		
11 59.5	+30 07		14.3		
11 59.8	+30 08		14.4		
11 59.9	+29 45		15.4		
12 00.3	+26 31		15.5		compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
3900	-	-	12.33	Sa	12.4	Sa	-	-



FIELD No. 158

12^h13^m $+29^o30'$

Survey Plate No. 1398

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
16630	12 08 13.9	+ 27 33 35	5.78
16710	12 11 37.4	+ 31 05 55	8.4
16766	12 14 59.6	+ 29 12 52	5.68
16829	12 17 49.0	+ 26 53 54	5.72
16918	12 22 01.1	+ 31 33 25	8.9
16964	12 24 26.9	+ 28 32 46	4.56

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1158.4 + 2954	medium compact	229	3.1	D	6
1159.1 + 2916	open	362	5.1	MD	7
1159.2 + 3021	medium compact	267	3.2	MD	5
1159.3 + 3057	open	81	1.3	VD	4
1159.4 + 3216	compact	59	0.7	ED	1
1159.8 + 2808	compact	184	1.9	ED	9
1200.0 + 3125	medium compact	51	0.6	ED	3
1200.4 + 3115	medium compact	70	1.0	ED	47
1200.5 + 2809	medium compact	406	5.3	MD	10
1200.7 + 2846	medium compact	155	1.5	D	8
1202.1 + 3218	compact	95	1.5	ED	22
1202.6 + 2700	compact	89	0.8	ED	13
1202.7 + 3225	medium compact	161	3.8	D	21
1203.4 + 2925	open	89	2.5	VD	49
1203.5 + 2914	compact	65	0.8	ED	50
1204.0 + 3154	medium compact	92	1.0	ED	46
1204.1 + 3043	medium compact	112	2.7	VD	48
1204.6 + 2716	compact	94	1.1	VD	2
1205.0 + 2715	open	127	4.6	MD	29
1205.4 + 2515	medium compact	297	9.4	Near	11
1205.4 + 3025	compact	104	1.3	ED	27
1205.6 + 2855	medium compact	133	1.5	ED	45
1206.0 + 3120	medium compact	168	3.2	D	23
1207.4 + 2730	medium compact	117	1.2	ED	44
1207.9 + 3042	medium compact	89	1.2	VD	26
1209.0 + 2722	medium compact	208	4.0	D	42
1209.1 + 3016	compact	161	1.5	VD	43
1209.6 + 3049	medium compact	154	3.1	D	25
1211.2 + 2930	compact	205	3.9	MD	38
1211.4 + 3228	medium compact	65	1.2	ED	20
1211.5 + 2657	compact	176	1.6	ED	41
1211.6 + 3155	medium compact	234	4.9	MD	18
1212.4 + 2654	medium compact	147	3.0	D	40
1212.7 + 2750	compact	189	2.5	VD	39
1212.8 + 3214	compact	134	1.7	ED	19
1214.0 + 2729	compact	111	1.1	ED	37
1216.4 + 2717	medium compact	128	2.7	MD	36
1216.5 + 3049	medium compact	143	3.4	D	24
1216.7 + 3008	open	116	3.2	D	34
1217.5 + 2915	medium compact	1828	30.9	Near	16
1217.9 + 2918	medium compact	111	3.0	D	35
1218.5 + 3217	medium compact	182	2.1	D	17
1218.9 + 2743	medium compact	165	3.6	MD	32
1219.1 + 2713	medium compact	104	1.3	ED	33
1222.9 + 2551	medium compact	167	6.2	MD	14
1224.6 + 3131	medium compact	521	11.9	Near	15
1224.8 + 2806	medium compact	216	1.9	VD	31
1225.2 + 3045	medium compact	132	3.1	D	28
1225.3 + 2700	medium compact	148	2.5	D	30
1227.9 + 3006	open	128	3.9	MD	12

Average number of galaxies per cluster = 191.4

GALAXIES

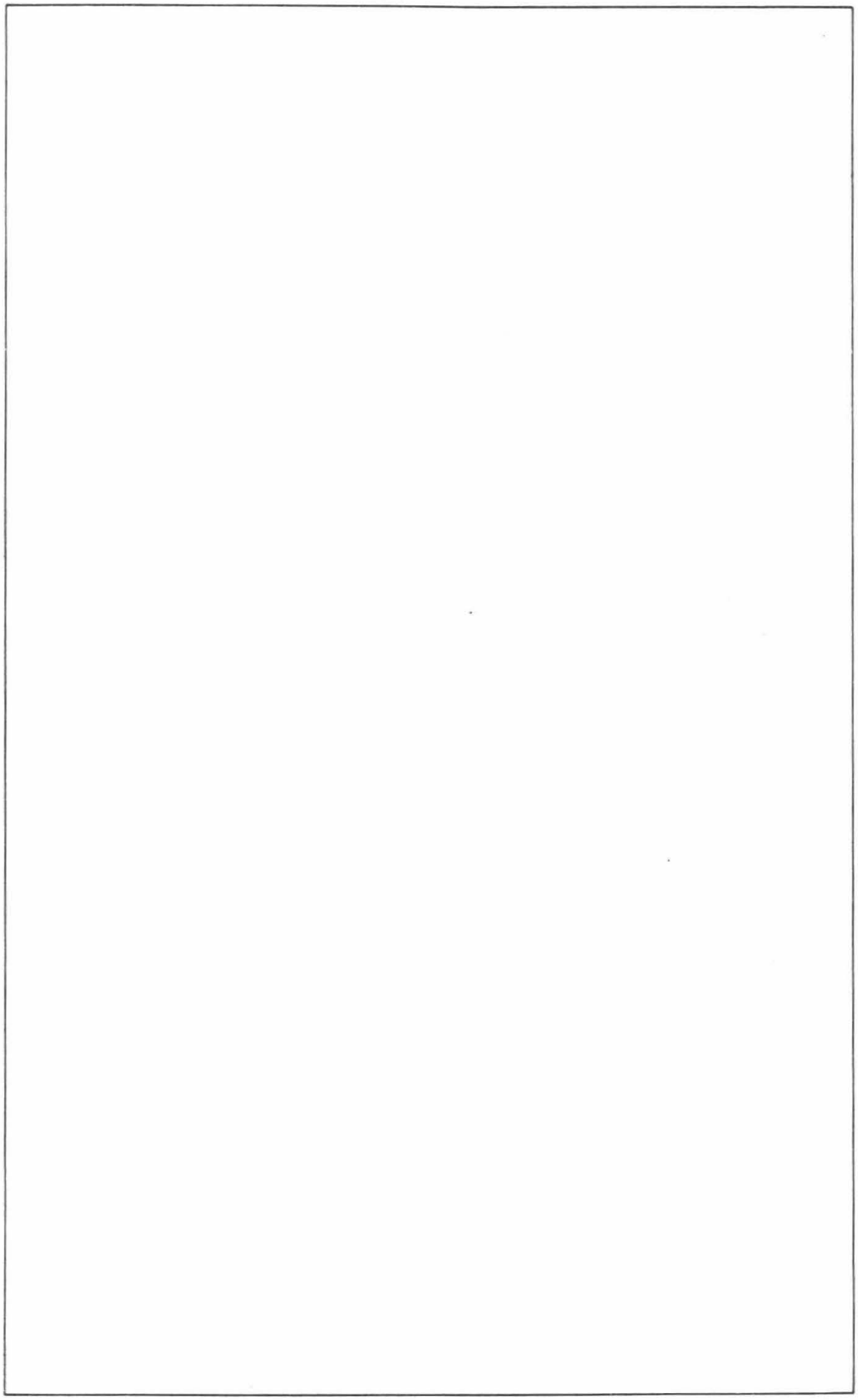
Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
11 59.5	+ 30 07		14.3		
11 59.8	+ 30 08		14.4		
11 59.9	+ 29 45		15.4		
12 00.3	+ 26 31		15.5		compact
12 00.8	+ 29 42		15.2		
12 01.5	+ 28 26		15.3		
12 01.5	+ 29 15		15.7		diffuse
12 01.5	+ 32 10	4062	11.9		m_H = 12.1 Sc
12 02.1	+ 31 27		14.0		
12 02.2	+ 31 26		15.2		
12 02.2	+ 31 28		15.7		double nebula
12 02.4	+ 27 16	4080	14.0		
12 02.7	+ 29 03		15.1		diffuse
12 02.7	+ 31 08		14.8		compact
12 02.9	+ 28 39		15.2		
12 03.2	+ 31 20		15.1		double system, bridge + plume
12 03.4	+ 31 38	2999*	15.6		
12 03.6	+ 28 31		15.6		
12 03.6	+ 28 32		15.6		
12 03.7	+ 32 15		15.4		
12 03.8	+ 28 14		15.7		
12 04.0	+ 28 13		15.4		
12 04.0	+ 28 25		15.3		compact
12 04.1	+ 28 27	4104	13.7		
12 04.1	+ 31 09		15.7		
12 04.7	+ 32 21		15.2		
12 04.9	+ 31 38	3007*	15.5		compact
12 06.1	+ 32 26		15.7		
12 06.2	+ 29 35	4131	14.1		
12 06.5	+ 29 31	4132	14.6		
12 06.6	+ 29 27	4134	13.8		
12 06.6	+ 31 11		15.7		
12 06.6	+ 31 51		14.4		
12 06.8	+ 30 12	4136	12.1	+ 445	m_H = 12.1 S
12 06.9	+ 26 30		15.3		very diffuse spiral
12 07.8	+ 26 42	4146	13.8		
12 08.0	+ 30 40	4150	12.6	+ 244	m_H = 12.6 Sa
12 08.4	+ 31 56		15.3		
12 09.0	+ 29 22		15.1		
12 09.4	+ 27 55		15.3		
12 09.7	+ 29 27	4169	12.9		
12 09.8	+ 29 05		14.8		
12 09.8	+ 29 29	4173	13.7		= NGC 4170 = NGC 4171
12 09.9	+ 29 25	4174	14.3		
12 10.0	+ 29 26	4175	14.2		
12 10.7	+ 29 07		15.0		
12 10.8	+ 28 47	4185	13.5		
12 10.9	+ 30 12		15.7		
12 11.6	+ 30 34		15.7		
12 11.9	+ 28 42	4196	13.7		
12 12.9	+ 27 10		15.3		double system
12 13.1	+ 27 17		15.4		very compact
12 13.1	+ 28 27	4211	14.4		double system, bridge + plume
12 13.4	+ 26 56		14.6		
12 13.4	+ 27 43		15.3		
12 13.6	+ 28 24		15.5		

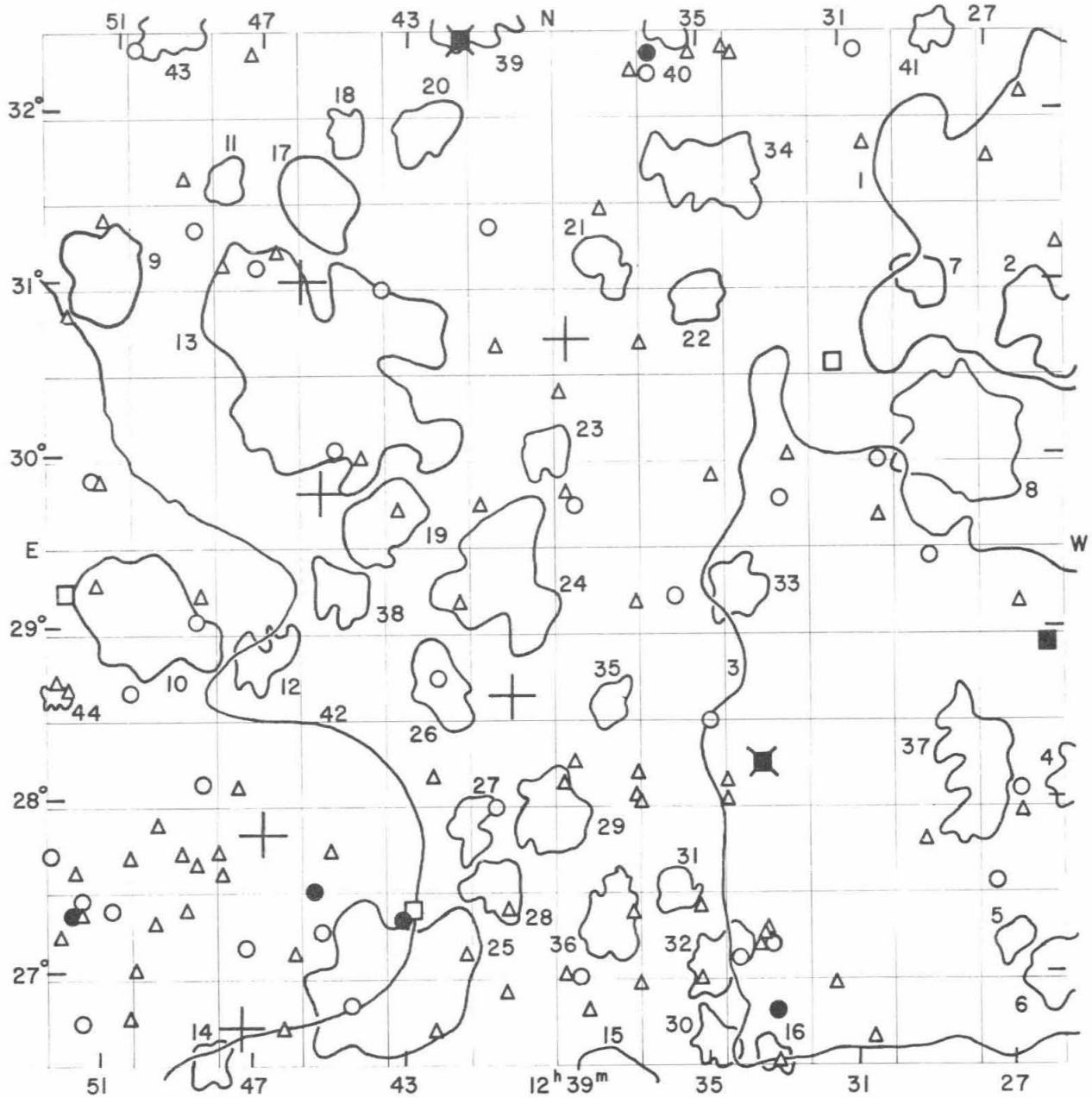
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 13.7	+ 29 02		15.5		
12 14.6	+ 30 55		15.7		compact
12 15.1	+ 29 53	4245	12.4	+ 890	m_H = 12.3 SBb
12 15.6	+ 28 28	4251	11.5	+ 1014	m_H = 11.6 Sa
12 15.9	+ 30 05	4253	13.7		
12 16.6	+ 27 35	3143*	15.7		diffuse
12 16.8	+ 30 37		15.6		
12 16.9	+ 28 35	777*	14.5		
12 17.1	+ 28 46		15.7		
12 17.1	+ 30 10		15.4		
12 17.2	+ 29 00		15.5		compact
12 17.2	+ 29 04		15.7		compact
12 17.2	+ 29 07		15.4		compact
12 17.2	+ 29 09		15.3		diffuse
12 17.3	+ 29 54	4274	11.1	+ 767	m_H = 11.7 Sa
12 17.3	+ 30 37	4272	14.2		
12 17.4	+ 27 54	4275	13.4		
12 17.4	+ 28 40		15.6		
12 17.4	+ 28 42		15.6		
12 17.5	+ 28 15	3165*	14.9		
12 17.6	+ 29 33	4278	11.2	+ 624	m_H = 11.6 E
12 17.7	+ 28 40		15.7		compact
12 17.8	+ 28 12	3168*	15.7		
12 17.8	+ 29 35	4283	13.1	+ 1071	m_H = 12.8 E
12 17.9	+ 31 27		14.5		
12 18.1	+ 31 04		15.0		
12 18.2	+ 29 38	4286=3181*	14.7		
12 18.5	+ 28 10	3193*	15.7		
12 18.7	+ 28 26	4295	15.0		compact
12 19.3	+ 26 38	3205*	15.7		
12 19.3	+ 26 39	3206*	15.7		
12 19.4	+ 30 20	4308	14.3		
12 19.5	+ 28 43	3210*	15.5		
12 19.5	+ 32 22		14.3		
12 19.6	+ 28 28	3212*	15.7		
12 19.9	+ 29 29	4310=4311	13.5		
12 20.0	+ 30 10	4314	11.5	+ 883	m_H = 11.7 SBp
12 20.1	+ 29 43		15.3		
12 20.7	+ 28 02	3243*	15.7		diffuse
12 20.8	+ 29 10	3247*	15.6		
12 21.3	+ 27 40	3262*	15.3		
12 21.3	+ 28 29	3263*	15.1		
12 21.7	+ 31 47	4359	13.9		
12 22.5	+ 28 50	4375	13.9		
12 22.8	+ 26 59	3308*	15.4		
12 22.9	+ 28 40	3309*	15.7		diffuse spiral
12 22.9	+ 32 05		15.7		
12 23.3	+ 27 50	4393	13.8		= IC 3323* = IC 3329*
12 23.5	+ 31 06	3330*	15.1		
12 23.8	+ 27 06	3336*	15.5		
12 23.8	+ 28 09	4408	15.2		compact
12 24.0	+ 31 30	4414	10.9	+ 715	m_H = 11.1 Sc
12 24.7	+ 27 14	3367*	15.7		double system
12 24.8	+ 30 54		15.7		
12 25.1	+ 31 13		15.3		
12 25.3	+ 27 16	3376*	14.4		
12 25.8	+ 28 54	4448	11.9	+ 693	m_H = 11.9 Sb
12 26.0	+ 32 05		15.7		
12 26.5	+ 29 08	3402*	15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 27.0 +31 44		15.1		very compact

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg, 1958	
4136	-	-	-	-	-	Sc	-	-
4150	-	-	12.63	S0	12.6	S0	-	-
4245	-	-	-	-	12.3	SBa	-	-
4251	-	-	-	-	11.6	S0	-	-
4274	11.2	Sa	11.27	Sa	10.8	Sa	11.33	Sa
4278	10.9	E	-	-	11.2	E1	11.20	E
4283	13.1	E	-	-	13.1	E0	13.27	E
4314	-	-	11.45	SBa	11.5	SBa	-	-
4414	-	-	10.96	Sc	10.9	Sc	-	-
4448	-	-	12.08	Sa	11.7	Sb	-	-





FIELD No. 159

12^h39^m $+29^o30'$

Survey Plate No. 64

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
17261	12 38 40.9	+ 30 42 40	6.88
17291	12 40 11.9	+ 28 38 04	7.47
17382	12 45 23.0	+ 29 48 16	7.11
17394	12 45 56.8	+ 31 02 22	8.02
17410	12 46 51.4	+ 27 49 27	5.83
17420	12 47 21.9	+ 26 42 14	6.89

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1217.5 + 2915	medium compact	1828	30.9	Near	3
1224.6 + 3131	medium compact	521	11.9	Near	1
1224.8 + 2806	medium compact	216	1.9	VD	4
1225.2 + 3045	medium compact	132	3.1	D	2
1225.3 + 2700	medium compact	148	2.5	D	6
1226.9 + 2710	medium compact	94	1.1	ED	5
1227.7 + 2811	medium compact	126	3.2	D	37
1227.9 + 3006	open	128	3.9	MD	8
1228.4 + 3228	compact	141	1.1	ED	41
1228.9 + 3101	compact	95	1.6	VD	7
1233.3 + 2632	medium compact	68	1.0	ED	16
1234.0 + 2916	medium compact	190	2.0	VD	33
1234.6 + 2705	medium compact	108	1.9	D	32
1234.7 + 3139	open	100	3.0	D	34
1234.8 + 2638	medium compact	72	1.5	VD	30
1235.0 + 3057	compact	149	1.6	ED	22
1235.8 + 2731	compact	104	1.3	ED	31
1235.8 + 3234	medium compact	153	1.6	VD	40
1237.5 + 2720	medium compact	206	2.1	ED	36
1237.5 + 2836	compact	124	1.3	VD	35
1237.6 + 3109	compact	158	1.6	ED	21
1238.5 + 2545	open	144	6.1	MD	15
1239.1 + 2757	medium compact	158	2.4	VD	29
1239.1 + 3004	medium compact	165	1.5	ED	23
1240.2 + 2921	compact	199	3.8	VD	24
1240.6 + 2731	compact	208	1.9	ED	28
1241.3 + 2753	medium compact	115	1.6	VD	27
1241.3 + 3244	open	100	3.3	D	39
1242.0 + 2843	compact	121	2.1	VD	26
1242.5 + 3155	compact	194	1.9	VD	20
1243.4 + 2658	medium compact	188	4.9	MD	25
1243.6 + 2939	compact	269	2.6	ED	19
1244.7 + 2915	compact	192	1.8	VD	38
1244.7 + 3153	medium compact	106	1.3	ED	18
1245.1 + 3030	medium compact	426	7.1	MD	13
1245.4 + 3129	open	109	2.6	VD	17
1246.9 + 2850	medium compact	209	1.8	VD	12
1248.0 + 2628	medium compact	75	1.3	ED	14
1248.0 + 3136	compact	131	1.3	VD	11
1249.9 + 3232	open	148	2.2	VD	43
1250.1 + 2905	medium compact	243	3.9	D	10
1251.4 + 3103	open	119	2.7	D	9
1252.6 + 2837	medium compact	72	0.8	ED	44
1257.1 + 2806	compact	2150	28.5	Near	42*

Average number of galaxies per cluster = 243.2

*Cluster No. 42 is the well known Coma I Cluster of galaxies.

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 25.1 +31 13		15.3		
12 25.8 +28 54	4448	11.9	+ 693	m_H = 11.9 Sb
12 26.0 +32 05		15.7		
12 26.5 +27 55	3406*	15.7		
12 26.5 +28 04	3407*	14.7		
12 26.5 +29 08	3402*	15.7		
12 27.0 +31 44		15.1		very compact
12 27.3 +27 32	4475	14.6		
12 28.9 +29 25	4495	14.1		
12 29.1 +27 47	3454*	15.7		
12 30.1 +30 00	4514	14.2		
12 30.2 +29 40		15.7		
12 30.4 +31 49		15.6		extremely diffuse dwarf system
12 30.6 +26 38	3488*	15.6		
12 30.6 +32 22		14.1		
12 31.3 +30 34	4525	13.0		
12 31.6 +26 57	3508*	15.4		
12 32.6 +30 02		15.1		
12 32.9 +29 47		14.9		
12 33.2 +26 30	3546*	15.3		
12 33.2 +26 48	4555	13.5		
12 33.3 +27 12	4556	14.4		
12 33.4 +27 17	4558	15.1		
12 33.4 +28 14	4559	10.7	+ 856	m_H = 10.7 Sc, see footnote*)
12 33.5 +27 15	4563	15.6		
12 33.6 +27 11	3561*	15.7		
12 34.0 +32 21		15.4		
12 34.1 +27 07	3585*	15.0		compact
12 34.3 +32 23		15.4		
12 34.4 +28 02	3593*	15.4		
12 34.4 +28 09	3592*	15.3		
12 34.7 +29 55		15.7		
12 34.8 +28 30	3598*	15.0		
12 35.1 +26 59	3599*	15.7		
12 35.1 +27 24	3600*	15.5		compact
12 35.2 +32 22		15.4		
12 35.7 +29 13	4585	14.6		
12 36.4 +32 16		14.6		
12 36.4 +32 23		14.0		
12 36.6 +30 41		15.2		
12 36.7 +26 57	3618*	15.5		compact
12 36.7 +28 01		15.4		
12 36.8 +28 03		15.3		
12 36.8 +28 11	3620*	15.6		
12 36.8 +29 11		15.6		
12 36.9 +27 23	3623*	15.2		
12 36.9 +32 16		15.6		
12 37.7 +31 27		15.5		
12 38.0 +26 48	3645*	15.4		
12 38.3 +27 00	3651*	14.4		
12 38.4 +28 15		15.4		double system
12 38.4 +29 45		14.9		
12 38.6 +29 49		15.7		double nebula
12 38.7 +27 01		15.5		
12 38.8 +28 08		15.6		
12 38.8 +30 24		15.4		

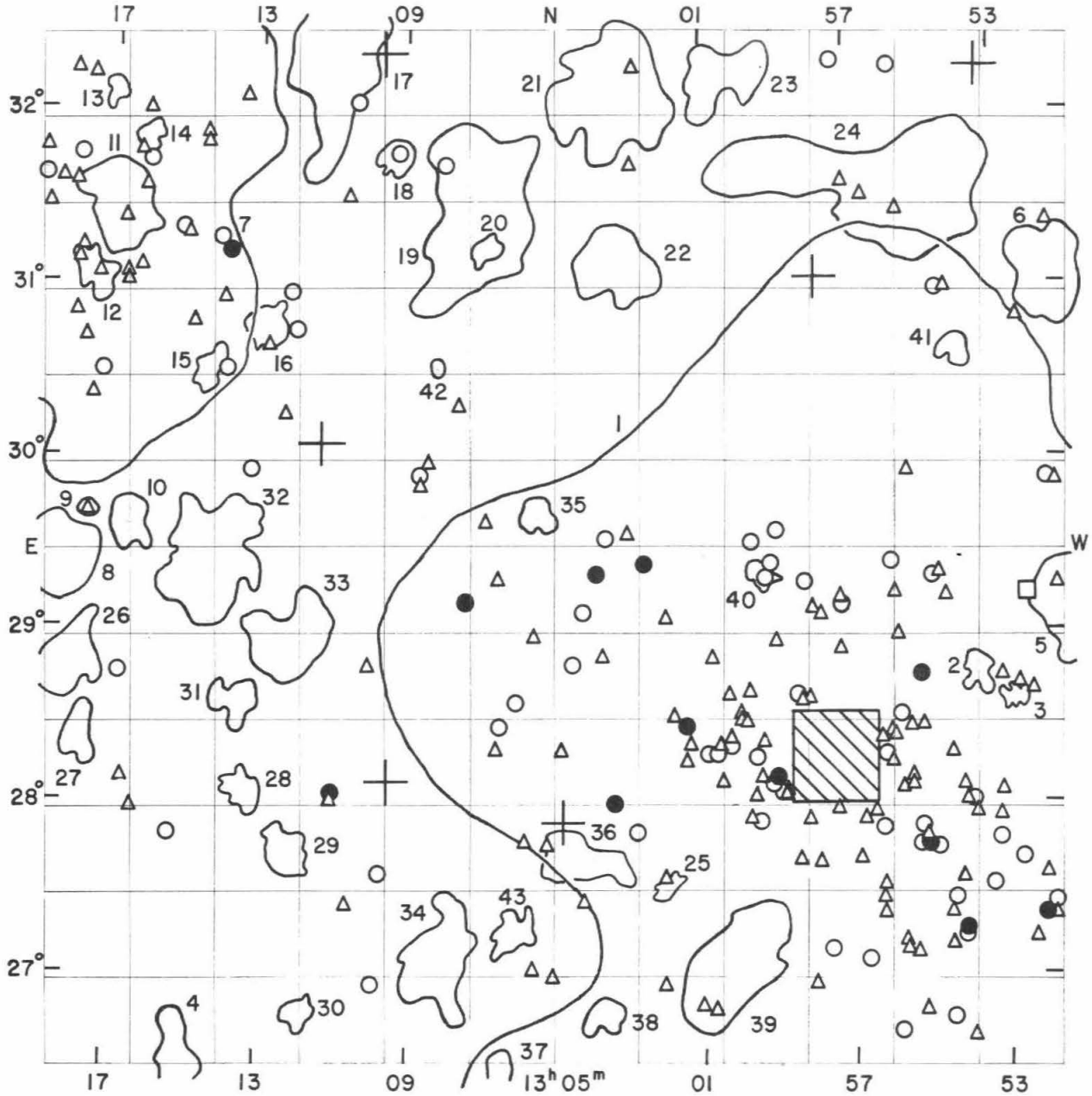
Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
12 40.2	+ 27 24		15.6		
12 40.3	+ 26 55		15.5		
12 40.6	+ 28 00		14.5		
12 40.6	+ 30 40		15.5		double system, connected
12 40.8	+ 31 22		14.8		
12 41.0	+ 29 45		15.7		
12 41.3	+ 27 08		15.7		
12 41.6	+ 29 10		15.6		
12 41.6	+ 32 27	4656=4657	10.6	+ 721	m_H = 11.3 I
12 42.1	+ 26 42		15.3		
12 42.1	+ 28 45		14.7		
12 42.2	+ 28 10		15.7		
12 42.8	+ 27 24	4670	12.6		m_H = 12.7
12 43.1	+ 27 20	4673	13.7		
12 43.2	+ 29 43		15.5		
12 43.7	+ 31 00	4676	14.1		double system, tidal effect + jet
12 44.2	+ 30 00	818*	15.1		
12 44.4	+ 26 50		15.0		compact
12 44.9	+ 27 44		15.2		
12 45.0	+ 30 04	821*	14.5		
12 45.1	+ 27 16		14.7		
12 45.4	+ 27 30	4692=823*	14.0		
12 45.9	+ 27 08		15.2		
12 46.2	+ 26 42		15.7		
12 46.6	+ 31 11		15.5		
12 47.1	+ 31 07		14.8		
12 47.2	+ 27 10		14.9		
12 47.3	+ 32 20		15.2		
12 47.4	+ 28 05	4715	15.4		
12 47.8	+ 27 36	4721	15.2		
12 48.0	+ 27 43	4728	15.6		
12 48.0	+ 31 07		15.4		
12 48.3	+ 28 06		14.8		
12 48.5	+ 27 39		15.5		
12 48.6	+ 29 12	4735	15.1		
12 48.7	+ 29 04	4738	14.9		
12 48.8	+ 27 23		15.3		
12 48.9	+ 27 42	4745	15.4		
12 48.9	+ 31 19	826*	14.9		
12 49.2	+ 31 37		15.1		
12 49.6	+ 27 18		15.4		
12 49.6	+ 27 51		15.5		
12 50.1	+ 27 01		15.7		
12 50.2	+ 26 45	831*	15.5		
12 50.3	+ 27 40		15.3		
12 50.4	+ 28 39		14.5		
12 50.6	+ 32 22		14.8		
12 50.7	+ 27 21		15.0		
12 51.4	+ 26 43	832*	15.0		
12 51.4	+ 29 15		15.6		
12 51.4	+ 29 51		15.3		
12 51.4	+ 31 22		15.3		
12 51.6	+ 27 25		14.9		diffuse + disrupted
12 51.6	+ 29 52		14.8		
12 51.7	+ 27 20	4787	15.5		
12 51.8	+ 27 35	4788	15.4		
12 51.9	+ 27 20	4789	13.3	+ 8372	
12 52.1	+ 28 39		15.5		
12 52.2	+ 27 12		15.6		

Position α 1950 h m	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
12 52.2	+ 29 12	4793	12.3	+ 2529	m_H = 12.5 Sc
12 52.3	+ 30 48		15.7		
12 52.5	+ 27 41	4798	14.3	+ 7673	
12 52.5	+ 28 41		15.7		

) IC - Nos. 3550, 3551*, 3552*, 3554*, 3555*, 3563*, 3564* refer to different condensations on the spiral arms of NGC 4559.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
4448	-	-	12.08	Sa	11.7	Sb	-	-
4559	10.3	Sc	-	-	-	Sc	10.26	Sc+
4656	9.5	Irr.	-	-	-	Irr.	10.74	Ir. I
4789	-	-	13.20	E	13.3	E5	-	-
4793	-	-	12.26	Sb	12.3	Sc	-	-
4798	-	-	14.31	E2	-	E3	-	-



FIELD No. 160

13^h05^m $+29^o30'$

Survey Plate No. 1393

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
17550	12 53 21.0	+ 32 16 17	6.93
17647	12 57 53.0	+ 31 03 15	5.08
17787	13 04 46.8	+ 27 53 33	4.90
17874	13 09 32.5	+ 28 07 52	4.32
17876	13 09 41.1	+ 32 21 02	6.66
17913	13 11 20.2	+ 30 04 58	7.5

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1250.1 + 2905	medium compact	243	3.9	D	5
1251.4 + 3103	open	119	2.7	D	6
1252.6 + 2837	medium compact	72	0.8	ED	3
1253.6 + 2846	medium compact	124	1.0	VD	2
1254.0 + 3039	compact	95	0.9	ED	41
1256.0 + 3135	open	127	5.3	MD	24
1257.1 + 2806	compact	2150	28.5	Near	1*
1259.4 + 2920	compact	66	0.8	VD	40
1300.3 + 2703	medium compact	209	3.4	VD	39
1300.4 + 3213	compact	113	2.4	D	23
1302.0 + 2731	open	59	0.7	ED	25
1303.2 + 3107	compact	152	2.5	VD	22**
1303.3 + 3206	compact	297	3.8	D	21
1303.6 + 2647	compact	102	1.2	ED	38
1304.2 + 2741	medium compact	79	2.1	VD	36
1305.4 + 2941	compact	99	1.1	ED	35
1306.0 + 2716	compact	114	1.4	ED	43
1306.4 + 2629	compact	91	1.0	ED	37
1306.8 + 3113	compact	80	0.9	ED	20
1306.9 + 3125	medium compact	102	4.4	D	19
1308.0 + 2705	medium compact	137	2.7	VD	34
1308.1 + 3031	compact	45	0.4	ED	42
1309.3 + 3145	compact	93	1.1	ED	18
1310.8 + 3230	medium compact	211	4.9	D	17
1311.8 + 2647	medium compact	88	1.0	ED	30
1312.0 + 2744	open	121	1.5	ED	29
1312.0 + 2857	compact	126	2.4	VD	33
1312.8 + 3046	open	103	1.3	VD	16
1313.2 + 2805	medium compact	134	1.3	ED	28
1313.4 + 2835	medium compact	105	1.5	ED	31
1314.1 + 2925	open	171	3.4	VD	32
1314.4 + 3030	medium compact	114	1.2	VD	15
1314.8 + 2631	compact	174	1.8	VD	4
1316.0 + 3153	medium compact	77	0.9	ED	14
1316.5 + 2939	medium compact	109	1.5	VD	10
1316.8 + 3129	open	100	2.5	D	11
1317.0 + 3208	compact	84	0.7	ED	13
1317.5 + 3105	medium compact	84	1.4	VD	12
1317.6 + 2943	compact	46	0.5	ED	9
1317.8 + 2824	open	98	1.4	ED	27
1318.0 + 2850	medium compact	91	2.0	VD	26
1318.4 + 2926	open	113	2.7	D	8
1319.6 + 3135	open	411	16.2	Near	7

Average number of galaxies per cluster = 170.4

*Cluster No. 1 is the well known Coma I Cluster of galaxies.

**Cluster No. 22 is the Coma II Cluster of galaxies.

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
12 51.4 + 29 15		15.6		
12 51.4 + 29 51		15.3		
12 51.4 + 31 22		15.3		
12 51.6 + 27 25		14.9		diffuse + disrupted
12 51.6 + 29 52		14.8		
12 51.7 + 27 20	4787	15.5		
12 51.8 + 27 35	4788	15.4		
12 51.9 + 27 20	4789	13.3	+ 8372	
12 52.1 + 28 39		15.5		
12 52.2 + 27 12		15.6		
12 52.2 + 29 12	4793	12.3	+ 2529	m_H = 12.5 Sc
12 52.3 + 30 48		15.7		
12 52.5 + 27 41	4798	14.3	+ 7673	
12 52.5 + 28 41		15.7		
12 53.0 + 28 05		15.5		
12 53.0 + 28 44		15.7		
12 53.1 + 27 47	4807	14.4		compact
12 53.1 + 27 56		15.3		
12 53.3 + 27 31	3900*	14.8	+ 7171	compact
12 53.7 + 27 57		15.5		compact
12 53.8 + 28 01	4816	14.8		
12 54.0 + 26 38		15.2		
12 54.0 + 28 01		15.5		
12 54.1 + 27 13	4821	15.0		
12 54.1 + 27 15	4819	14.0		
12 54.1 + 27 33	3913*	15.5		
12 54.1 + 28 06		15.6		
12 54.3 + 27 26	4827	14.1		
12 54.3 + 28 17	4828	15.4		compact
12 54.3 + 30 59		15.1		compact
12 54.4 + 27 22		15.7		
12 54.5 + 26 45	835*	14.9		
12 54.5 + 27 10		15.1		
12 54.5 + 29 12		15.2		
12 54.6 + 29 19		15.4		
12 54.6 + 30 59		14.7		
12 54.8 + 27 44		15.0		compact
12 54.8 + 29 18		14.8		
12 55.0 + 27 46	4839	13.6		
12 55.0 + 27 49		15.3		compact
12 55.1 + 26 46	837*	15.4		
12 55.1 + 27 53	4840	14.8		
12 55.1 + 28 28		15.4		
12 55.1 + 28 45	4841	13.5		double system in halo
12 55.2 + 27 07		15.5		
12 55.2 + 27 45	4842	14.9		double system
12 55.3 + 28 06		15.7		
12 55.3 + 28 09		15.3		double system
12 55.4 + 28 27		15.5		very compact
12 55.4 + 29 55		15.2		
12 55.6 + 27 08		15.2		
12 55.6 + 27 11		15.5		
12 55.6 + 28 05		15.7		
12 55.6 + 31 26		15.5		
12 55.7 + 28 31	4848	14.2	+ 7209	
12 55.8 + 26 40	838*	14.5		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
12 55.8	+ 28 24		15.5		
12 55.8	+ 28 59		15.5		
12 55.8	+ 29 13		15.2		
12 55.8	+ 32 17		15.0		
12 55.9	+ 28 25	4851+839*	15.2		double nebula
12 55.9	+ 29 24		15.0		double nebula
12 56.0	+ 28 14	4850	15.3	+ 5984	
12 56.1	+ 27 31		15.4		
12 56.1	+ 28 17		15.0		very compact
12 56.2	+ 27 22		15.3		
12 56.2	+ 27 26		15.4		
12 56.2	+ 27 51	4853	14.2	+ 7550	very compact
12 56.2	+ 28 23	3943*	15.6		
12 56.4	+ 27 57	4854	15.2		
12 56.6	+ 27 05	4859	14.8		
12 56.6	+ 31 31		15.7		
12 56.7	+ 27 55		15.1		
12 56.8	+ 27 40		15.4		compact
12 57.1	+ 31 36		15.6		very compact
12 57.2	+ 28 54		15.6		
12 57.2	+ 29 10	3990*	15.0		
12 57.2	+ 29 12	3991*	15.5		
12 57.3	+ 27 58		15.1		
12 57.4	+ 32 18		14.7		
12 57.6	+ 27 10	4892	14.7		
12 57.8	+ 27 39		15.6		
12 57.8	+ 29 06		15.4		
12 58.0	+ 26 56		15.2		
12 58.0	+ 29 08	4032*	15.4		compact
12 58.1	+ 27 55		15.4		
12 58.1	+ 28 37	4896	15.1	+ 5820	
12 58.2	+ 29 17	842*	14.6		
12 58.3	+ 28 36		15.6		compact
12 58.4	+ 27 40		15.5		
12 58.5	+ 28 38		14.9		
12 58.7	+ 28 05		15.7		
12 58.8	+ 28 04		15.7		
12 58.9	+ 28 04	4919	14.9		
12 59.0	+ 28 08	4921	13.7	+ 5459	
12 59.0	+ 29 35	4922	14.2		double system in halo
12 59.1	+ 28 06	4923	14.7		
12 59.1	+ 28 57		15.3		
12 59.2	+ 29 24	843*	14.8		
12 59.4	+ 28 09		15.5		compact
12 59.4	+ 28 22		15.2		
12 59.4	+ 29 19	4088*	14.8		
12 59.5	+ 27 53	4926	14.1		
12 59.6	+ 28 03		15.4		
12 59.6	+ 28 16	4927	14.8		
12 59.7	+ 27 55		15.1		
12 59.7	+ 29 31		14.9		
12 59.8	+ 28 29		15.5		
12 59.8	+ 28 40		15.5		
13 00.0	+ 28 30		15.2		
13 00.0	+ 28 32		15.7		
13 00.2	+ 28 22	4106*	15.5		double nebula
13 00.3	+ 28 18	4929	14.9		
13 00.3	+ 28 39		15.6		
13 00.4	+ 28 07		15.4		

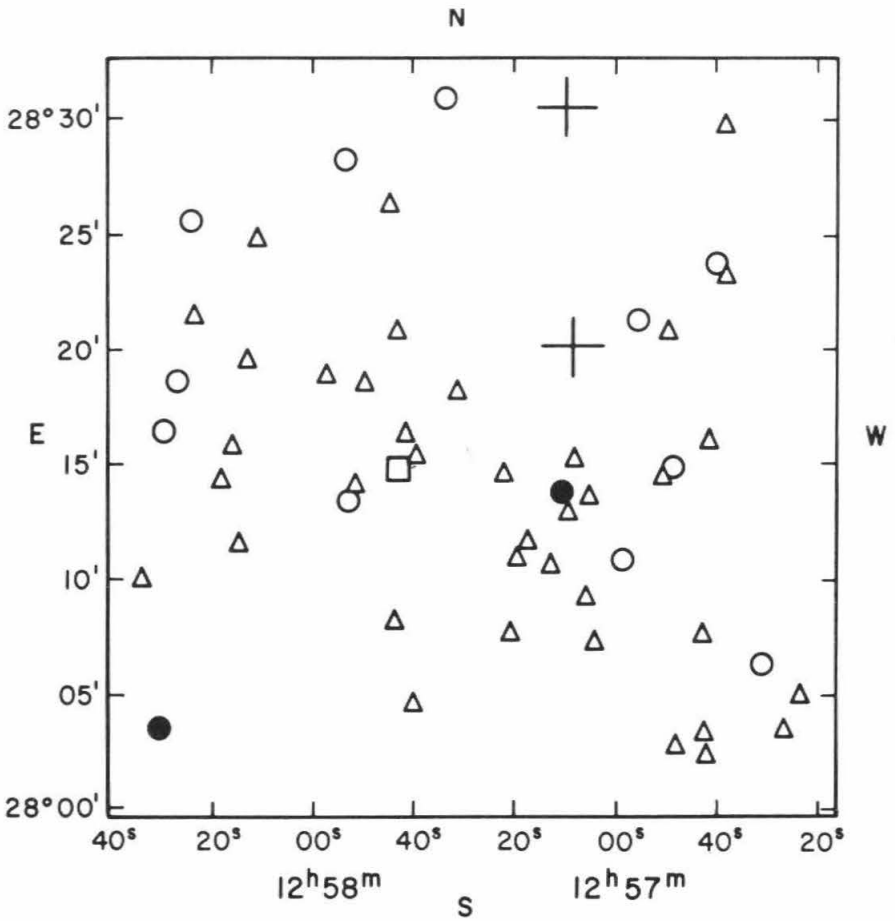
Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
13 00.5	+ 28 20	4111*	15.7		
13 00.6	+ 26 47		15.7		
13 00.6	+ 28 17	4931	14.4		
13 00.8	+ 28 50		15.2		
13 00.9	+ 28 17	4934	15.0		
13 01.0	+ 26 49		15.5		
13 01.4	+ 28 21	4943	15.6		
13 01.5	+ 28 15	4133*	15.4		very compact
13 01.5	+ 28 28	4944	13.3		double system
13 01.8	+ 28 31		15.4		
13 02.0	+ 26 56		15.3		
13 02.0	+ 27 34		15.5		
13 02.0	+ 29 05		15.3		
13 02.6	+ 29 23	4952	13.6	+ 5865	
13 02.8	+ 27 50	4957	14.2		
13 02.9	+ 32 16		15.1		
13 03.0	+ 29 34		15.5		
13 03.0	+ 31 43	4166*	15.2		
13 03.3	+ 28 00	4961	13.5		m_H = 13.2
13 03.6	+ 28 51		15.5		
13 03.6	+ 29 33		15.0		compact
13 03.9	+ 29 20	4966	13.9		double system
13 04.1	+ 27 26		15.7		
13 04.2	+ 29 06		15.0		
13 04.5	+ 28 48	4971	15.0		
13 04.8	+ 28 18		15.5		diffuse
13 05.0	+ 26 59		15.5		double system
13 05.2	+ 27 45		15.7		
13 05.6	+ 27 01		15.6		
13 05.6	+ 28 58		15.4		
13 05.8	+ 27 46		15.4		
13 06.0	+ 28 35	4983	14.9		
13 06.5	+ 28 27		14.3		
13 06.6	+ 28 18		15.6		
13 06.6	+ 29 18		15.7		
13 06.9	+ 29 38		15.1		
13 07.4	+ 29 10	5000	14.0		
13 07.6	+ 30 18		15.4		
13 08.0	+ 31 43		15.0		compact
13 08.4	+ 29 59	4210*	15.3		
13 08.7	+ 29 50		15.3		
13 08.7	+ 29 54	5004	14.3		
13 09.3	+ 31 46		14.6		compact
13 09.7	+ 27 35		15.0		
13 09.9	+ 26 57		14.6		
13 10.0	+ 28 47		15.7		
13 10.4	+ 32 04	5025	14.6		
13 10.6	+ 27 25		15.7		double system
13 10.6	+ 31 31		15.2		
13 11.0	+ 28 01		15.4		
13 11.0	+ 28 04	5032	13.6		
13 12.0	+ 30 45		15.0		
13 12.2	+ 30 58	5041	14.2		
13 12.3	+ 30 15		15.6		
13 12.8	+ 30 39		15.4		
13 13.2	+ 29 55	5052	14.6		
13 13.4	+ 32 06		15.1		
13 13.8	+ 31 12	5056	13.6		
13 13.9	+ 30 31		14.9		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
13 14.0	+ 30 55		15.1		
13 14.1	+ 31 17	5057	14.6		
13 14.6	+ 31 50		15.4		
13 14.6	+ 31 52		15.6		
13 14.9	+ 30 47		15.3		
13 15.0	+ 31 18		15.4		
13 15.2	+ 31 20	5065	14.3		
13 15.4	+ 27 49		15.0		
13 16.1	+ 31 44	5074	14.7		m_H = 13.2
13 16.1	+ 32 02		15.6		
13 16.2	+ 31 36		15.2		compact
13 16.3	+ 31 07		15.5		
13 16.3	+ 31 49		15.6		
13 16.4	+ 28 00		15.6		
13 16.7	+ 28 09		15.7		
13 16.7	+ 31 02		15.3		compact
13 16.7	+ 31 04		15.7		
13 16.8	+ 28 46	5081	14.3		
13 16.8	+ 31 24		15.6		
13 17.3	+ 30 31	5089	14.4		
13 17.5	+ 31 05		15.7		
13 17.6	+ 29 41		15.4		
13 17.6	+ 30 23		15.2		
13 17.7	+ 32 14	4225*	15.1		
13 17.8	+ 30 43		15.7		
13 17.9	+ 31 10		15.5		
13 17.9	+ 31 15		15.1		
13 18.0	+ 31 47		14.9		
13 18.1	+ 30 51		15.4		compact
13 18.1	+ 31 37		15.6		double system
13 18.1	+ 32 15	4226*	15.2		
13 18.5	+ 31 38		15.6		
13 18.9	+ 31 29		15.3		
13 19.0	+ 31 39		15.0		
13 19.0	+ 31 48		15.4		

52 additional galaxies, located in the central part of the Coma Cluster, are mapped and listed on the following pages.

GALAXIES IN CENTER OF COMA CLUSTER

(shaded area of main chart)



AGK2 STARS ON SPECIAL MAP

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
+ 28° 1287	12 57 08.1	+ 28 20 07	7.5
+ 28° 1288	12 57 09.2	+ 28 30 30	8.5

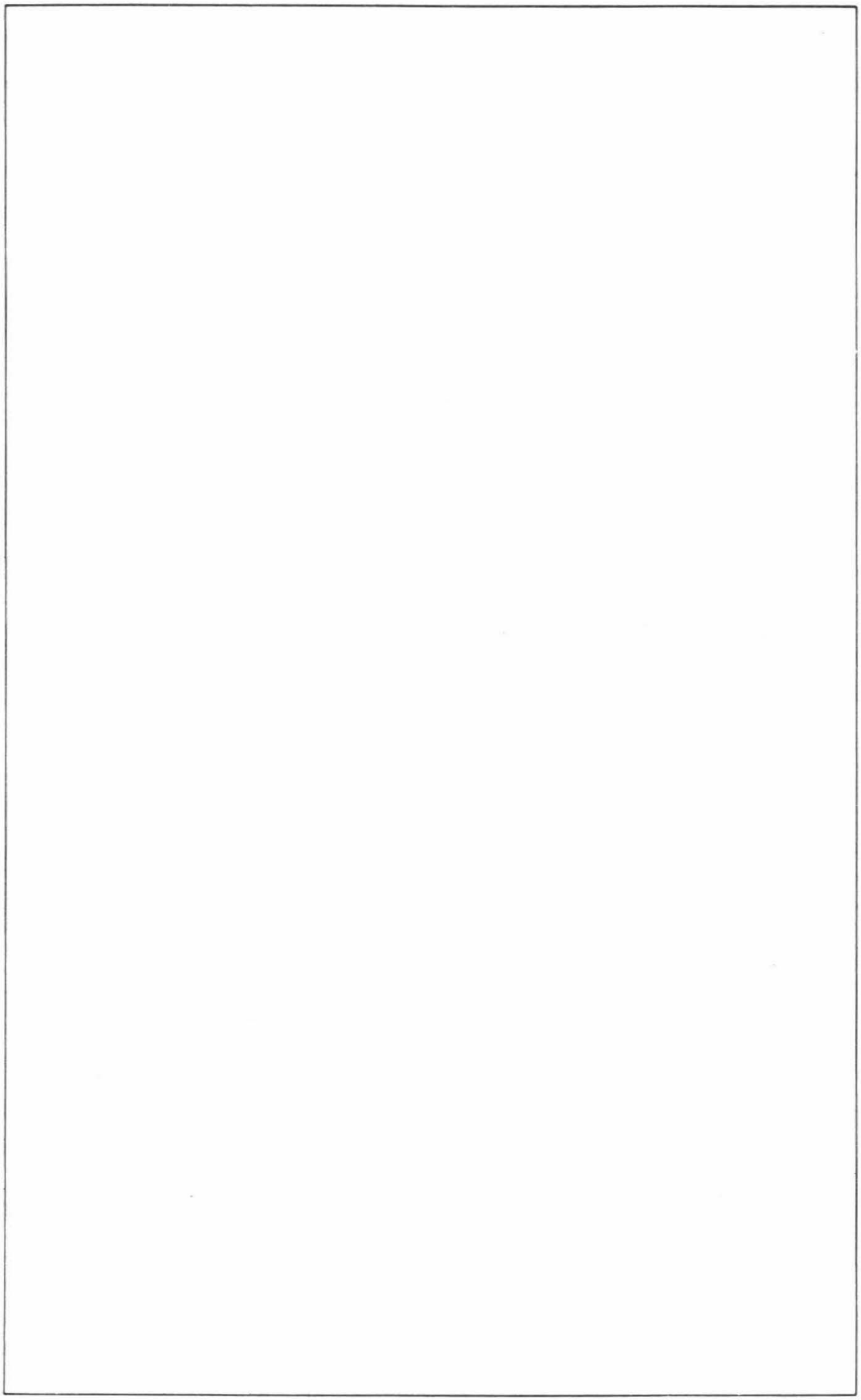
GALAXIES IN CENTER OF COMA CLUSTER

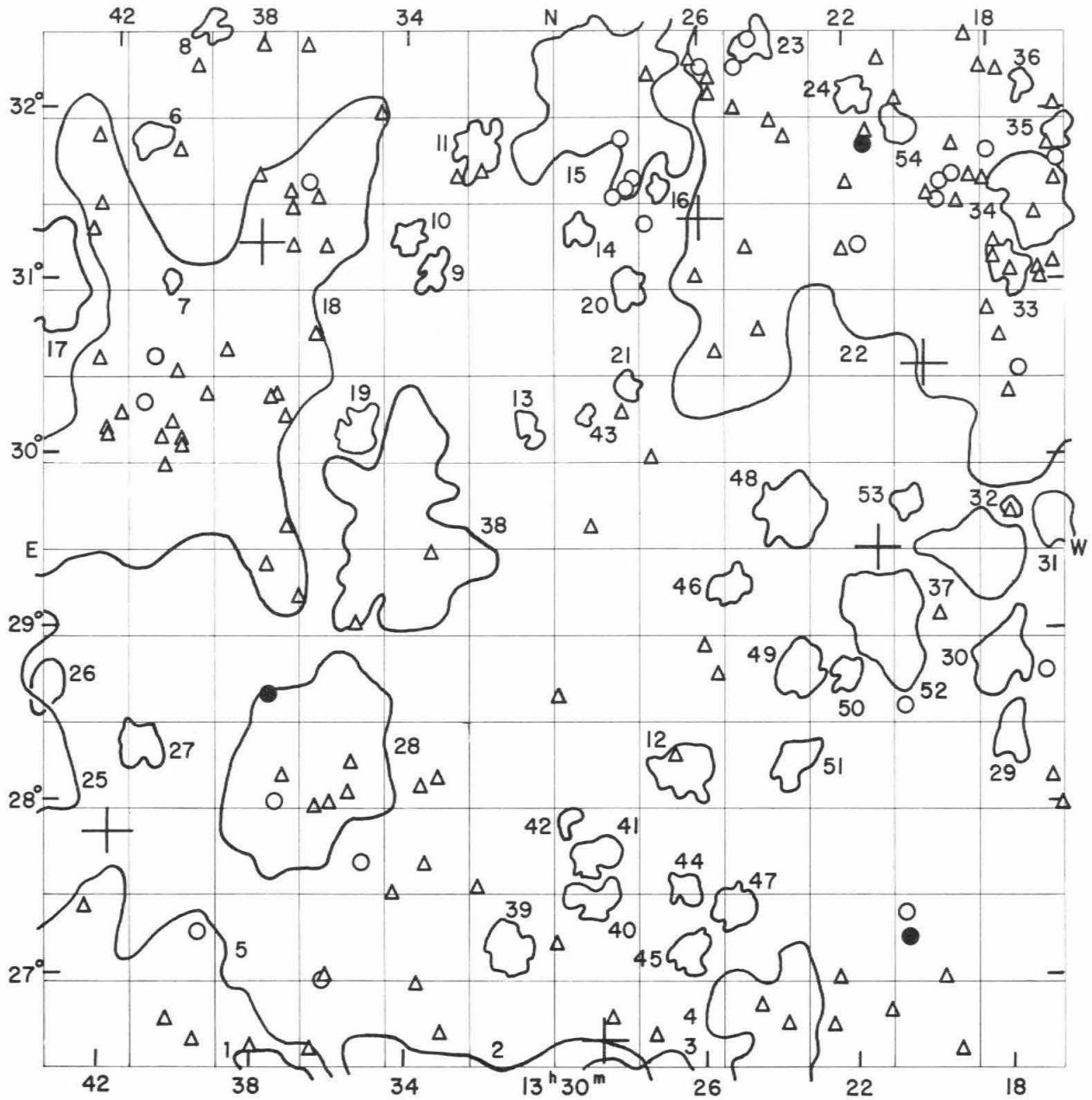
Position α 1950 h m s	Position δ 1950 o '	NGC IC*	m_p	V_s km/sec	Remarks
12 56 24	+ 28 05.0	3946*	15.3	+ 6101	
12 56 27	+ 28 03.5	3947*	15.6		
12 56 32	+ 28 06.4	3949*	14.9	+ 7526	
12 56 38	+ 28 23.2	4858	15.5		
12 56 38	+ 28 29.8		15.3		
12 56 40	+ 28 23.7	4860	14.7	+ 7858	
12 56 41	+ 28 16.0	3955*	15.6		
12 56 42	+ 28 02.4	3957*	15.6		compact
12 56 43	+ 28 03.4	3959*	15.2		
12 56 43	+ 28 07.6	3960*	15.5		
12 56 48	+ 28 02.8	3963*	15.7		
12 56 48	+ 28 14.9	4864	14.8	+ 6819	
12 56 50	+ 28 14.5	4867	15.5	+ 4815	
12 56 50	+ 28 20.8		15.6		
12 56 55	+ 28 21.2	4865	14.6	+ 4643	
12 56 58	+ 28 11.0	4869	14.9	+ 6703	
12 57 04	+ 28 07.3	3976*	15.5		
12 57 05	+ 28 13.7	4871	15.1		
12 57 06	+ 28 09.4	3973*	15.2		
12 57 08	+ 28 15.1	4873	15.4		
12 57 09	+ 28 13.0	4872	15.3	+ 6910	
12 57 11	+ 28 13.8	4874	13.7	+ 7171	m_H = 12.6 S*)
12 57 13	+ 28 10.6	4875	15.6		
12 57 17	+ 28 11.7		15.7		compact
12 57 19	+ 28 11.0	4876	15.1		
12 57 21	+ 28 07.6		15.6		
12 57 22	+ 28 14.6	3998*	15.6		
12 57 31	+ 28 18.2	4883	15.2		
12 57 33	+ 28 31.0	4881	14.7	+ 6691	
12 57 39	+ 28 15.3	4886	15.1	+ 6214	
12 57 40	+ 28 04.6		15.7		
12 57 42	+ 28 14.7	4889	13.0	+ 6500	
12 57 42	+ 28 16.3	4011*	15.6		
12 57 43	+ 28 08.1		15.6		double system + jets
12 57 43	+ 28 20.8	4012*	15.7		
12 57 45	+ 28 26.2		15.6		
12 57 50	+ 28 18.5	4021*	15.6	+ 5789	
12 57 52	+ 28 14.2	4894	15.7		
12 57 53	+ 28 13.5	4898	14.7	+ 6935	double nebula
12 57 53	+ 28 28.1	4895	14.3	+ 8406	
12 57 57	+ 28 18.9	4026*	15.5		
12 58 11	+ 28 24.9		15.7		
12 58 13	+ 28 19.6	4040*	15.1	+ 7515	
12 58 15	+ 28 11.6	4906	15.2		
12 58 16	+ 28 15.8	4041*	15.7		
12 58 18	+ 28 14.2	4042*	15.5		northern one of two
12 58 24	+ 28 21.5	4045*	15.1	+ 6527	
12 58 24	+ 28 25.5	4907	14.6	+ 5868	
12 58 27	+ 28 18.6	4908	14.9	+ 8838	
12 58 29	+ 28 16.5	4051*	14.8	+ 4932	
12 58 30	+ 28 03.5	4911	13.7	+ 8006	
12 58 34	+ 28 10.0		15.6		

*) In the Shapley Ames catalog this information is assigned to NGC 4872 as a result of an erroneous identification of the NGC numbers.

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Sandage	Mayall, 1956	Holmberg 1958	
4789	-	-	13.20	E	13.3	E5	-	-
4793	-	-	12.26	Sb	12.3	Sc	-	-
4798	-	-	14.31	E2	-	E3	-	-
4827	-	-	13.95	E	-	-	-	-
4841	-	-	13.65	E1+E0	-	-	-	-
4848	-	-	-	-	-	pec.	-	-
4850	-	-	15.37	S0	15.4	S0	-	-
4853	-	-	14.43	E1	14.5	E1	-	-
4860	-	-	14.93	E2	15.0	E2	-	-
4864	-	-	14.81	E1	-	E1	-	-
4865	-	-	14.44	E6	14.7	E6	-	-
4867	-	-	15.61	E3	15.7	Sa	-	-
4869	-	-	14.92	E3	15.0	E3	-	-
4872	-	-	15.38	E0	15.4	E4	-	-
4874	-	-	13.80	S0	13.7	S0	-	-
4881	-	-	14.75	E1	14.8	E1	-	-
4886	-	-	15.18	S0	15.2	S0	-	-
4889	-	-	12.83	E4	12.9	E4	-	-
4895	-	-	14.35	S0	14.3	S0	-	-
4896	-	-	15.16	S0	15.1	S0	-	-
4898	-	-	14.67	S0	-	S0	-	-
4907	-	-	14.74	SBb	14.7	SBb	-	-
4908	-	-	15.07	E4	15.1	E4	-	-
4911	-	-	13.50	Sb	13.6	Sb	-	-
4921	-	-	13.64	Sa	13.6	Sa	-	-
4926	-	-	14.13	E2	-	-	-	-
4931	-	-	14.60	E4	-	-	-	-
4952	-	-	-	-	-	E5	-	-
4957	-	-	14.19	E2	-	-	-	-
4961	-	-	13.84	Irr.	-	-	-	-
3900*	-	-	-	-	-	S0	-	-
3946*	-	-	15.20	S0	15.3	S0	-	-
3949*	-	-	-	-	-	S0	-	-
4012*	-	-	16.21	E0	-	-	-	-
4021*	-	-	15.52	E0	15.8	E0	-	-
4040*	-	-	-	-	-	Spec	-	-
4045*	-	-	15.33	E2	15.4	E2	-	-
4051*	-	-	14.96	E1	14.8	E1	-	-





FIELD No. 161

$13^h30^m \quad +29^\circ30'$

Survey Plate No. 131

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	° ' "	
18096	13 19 54.9	+ 30 33 13	6.92
18119	13 21 14.2	+ 29 29 41	8.86
18214	13 26 00.0	+ 31 24 28	7.12
18273	13 28 39.8	+ 26 38 50	7.15
18479	13 37 59.0	+ 31 15 48	6.08
18569	13 41 51.9	+ 27 50 12	7.06

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1316.0 + 3153	medium compact	77	0.9	ED	35
1316.5 + 2939	medium compact	109	1.5	VD	31
1316.8 + 3129	open	100	2.5	D	34
1317.0 + 3208	compact	84	0.7	ED	36
1317.5 + 3105	medium compact	84	1.4	VD	33
1317.6 + 2943	compact	46	0.5	ED	32
1317.8 + 2824	open	98	1.4	ED	29
1318.0 + 2850	medium compact	91	2.0	VD	30
1318.4 + 2926	open	113	2.7	D	37
1319.6 + 3135	open	411	16.2	Near	22
1320.4 + 3155	compact	144	1.1	ED	54
1320.5 + 2945	compact	75	0.9	ED	53
1321.0 + 2904	open	112	2.8	ED	52
1321.6 + 3206	compact	104	1.1	ED	24
1322.1 + 2845	compact	102	1.0	ED	50
1323.4 + 2847	open	64	1.7	ED	49
1323.6 + 2815	compact	90	1.4	ED	51
1323.6 + 2942	medium compact	135	2.2	VD	48
1324.5 + 3225	medium compact	120	1.2	ED	23
1324.6 + 2602	open	285	6.3	D	4
1325.2 + 2725	medium compact	134	1.3	D	47
1325.2 + 2916	compact	105	1.2	ED	46
1326.4 + 2710	medium compact	96	1.3	ED	45
1326.5 + 2731	compact	85	1.0	ED	44
1326.5 + 2812	open	71	1.8	ED	12
1327.1 + 3134	compact	74	0.7	ED	16
1327.8 + 2620	medium compact	149	2.8	VD	3
1327.9 + 3059	compact	113	1.1	ED	20
1328.0 + 3026	medium compact	58	0.8	ED	21
1328.5 + 3205	medium compact	419	5.0	VD	15
1328.8 + 2743	open	118	1.4	VD	41
1328.9 + 2727	open	114	1.4	ED	40
1329.1 + 3015	compact	55	0.5	ED	43
1329.3 + 3119	compact	93	0.9	ED	14
1329.6 + 2755	compact	55	0.7	ED	42
1330.6 + 3011	medium compact	86	0.9	ED	13
1331.1 + 2711	open	66	1.6	ED	39
1332.0 + 2605	medium compact	345	7.7	MD	2
1332.1 + 3148	compact	164	1.7	VD	11
1333.2 + 3105	compact	97	1.1	ED	9
1334.0 + 2936	open	180	5.4	MD	38
1334.0 + 3116	medium compact	92	0.9	ED	10
1335.3 + 3010	medium compact	87	1.2	ED	19
1336.4 + 2812	open	174	5.7	MD	28
1337.2 + 2621	open	96	2.2	D	1
1339.4 + 3229	compact	77	1.0	ED	8
1339.9 + 3030	medium compact	417	11.2	Near	18
1340.4 + 3100	compact	54	0.6	ED	7
1341.0 + 2820	compact	132	1.4	ED	27
1341.0 + 3150	open	89	1.1	VD	6
1341.6 + 2614	medium compact	694	12.5	Near	5
1343.5 + 2839	medium compact	60	1.3	ED	26
1343.8 + 3100	medium compact	124	2.8	VD	17
1346.2 + 2814	compact	320	8.4	Near	25

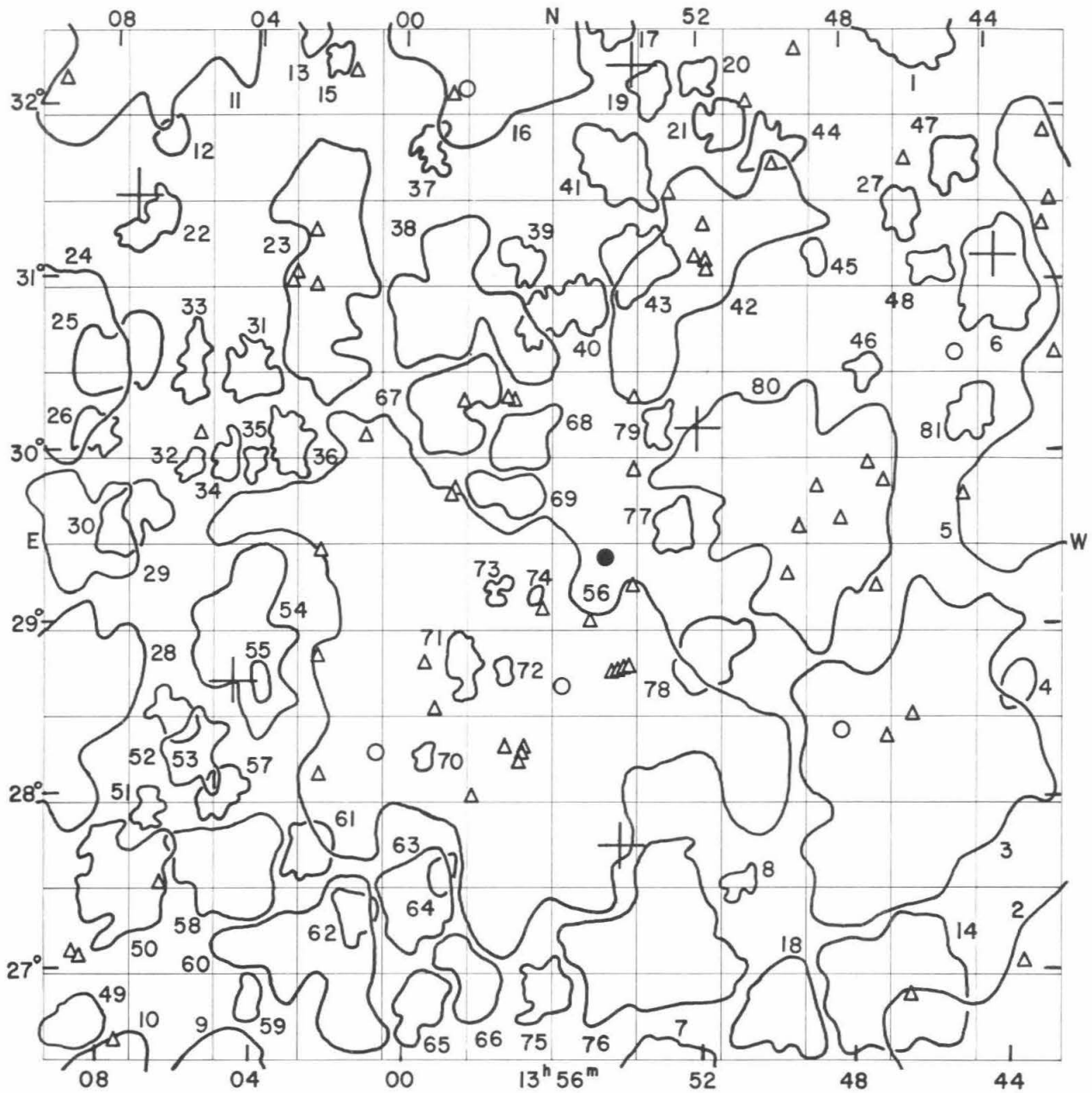
Average number of galaxies per cluster = 139.6

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 16.1 +31 44	5074	14.7		m_H = 13.2
13 16.1 +32 02		15.6		
13 16.2 +31 36		15.2		compact
13 16.3 +31 07		15.5		
13 16.3 +31 49		15.6		
13 16.4 +28 00		15.6		
13 16.7 +28 09		15.7		
13 16.7 +31 02		15.3		compact
13 16.7 +31 04		15.7		
13 16.8 +28 46	5081	14.3		
13 16.8 +31 24		15.6		
13 17.3 +30 31	5089	14.4		
13 17.5 +31 05		15.7		
13 17.6 +29 41		15.4		
13 17.6 +30 23		15.2		
13 17.7 +32 14	4225*	15.1		
13 17.8 +30 43		15.7		
13 17.9 +31 10		15.5		
13 17.9 +31 15		15.1		
13 18.0 +31 47		14.9		
13 18.1 +30 51		15.4		compact
13 18.1 +31 37		15.6		double system
13 18.1 +32 15	4226*	15.2		
13 18.5 +31 38		15.6		
13 18.6 +32 27	4227*	15.6		
13 18.9 +31 29		15.3		
13 19.0 +31 39		15.0		
13 19.0 +31 48		15.4		
13 19.3 +26 34		15.7		
13 19.3 +31 37		14.8		
13 19.4 +31 30		14.9		
13 19.7 +27 00	4230*	15.2		
13 19.7 +29 06		15.4		
13 19.7 +31 32		15.7		
13 20.5 +32 05		15.4		
13 20.6 +27 15	5116	13.7		
13 20.6 +28 35	5117	14.5		
13 20.7 +27 23	4234*	14.9		
13 21.0 +32 19		15.6		
13 21.1 +26 48		15.6		
13 21.3 +31 54		15.5		
13 21.4 +31 50	5127	13.9		
13 21.6 +31 15	5131	14.4		
13 21.9 +31 36		15.3		
13 22.1 +31 13	4239*	15.3		
13 22.4 +27 00	4241*	15.5		
13 22.6 +26 43	4244*	15.6		
13 23.6 +31 53		15.1		
13 23.9 +26 45	4250*	15.2		double nebula
13 24.0 +31 58		15.6		double system
13 24.4 +30 46		15.6		very compact
13 24.6 +26 51		15.1		double nebula
13 24.6 +32 28		14.6		
13 24.8 +31 14	4256*	15.5		
13 25.0 +32 03		15.7		
13 25.0 +32 17	5157	14.4		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 25.6 +28 46		15.2		
13 25.6 +30 38		15.4		double system
13 25.7 +32 07		15.7		
13 25.7 +32 13		15.7		
13 25.9 +28 56		15.6		
13 25.9 +32 17	5166	14.3		
13 26.1 +31 05		15.5		
13 26.2 +32 20		15.6		
13 26.8 +28 18		15.7		
13 27.3 +26 40		15.7		double system
13 27.3 +30 02		15.5		
13 27.4 +32 15		15.7		
13 27.5 +31 23	5187	14.6		
13 27.8 +31 39		15.0		compact
13 28.0 +31 35		14.9		
13 28.1 +30 17		15.1		
13 28.1 +31 53		14.2		
13 28.3 +31 32		14.6		double system
13 28.4 +26 47		15.7		
13 28.9 +29 38		15.6		diffuse spiral
13 29.9 +27 13		15.7		
13 29.9 +28 39	4283*	15.4		
13 32.0 +27 32		15.6		
13 32.0 +31 41		15.5		
13 32.6 +31 39		15.1		
13 33.0 +26 41	4297*	15.5		
13 33.1 +28 10		15.5		
13 33.3 +29 29		15.1		
13 33.4 +27 40		15.7		diffuse
13 33.6 +26 58		15.6		
13 33.6 +28 07		15.7		
13 34.3 +27 30	4307*	15.2		very compact
13 34.7 +32 01		15.7		
13 35.1 +27 41	5251	14.7		
13 35.3 +29 04		15.6		
13 35.4 +28 15		15.7		
13 35.5 +28 05		15.6		
13 36.0 +27 01	4313*	15.6		very compact
13 36.0 +28 02		15.5		
13 36.1 +27 00	4314*	15.0		compact
13 36.2 +31 15		15.7		
13 36.4 +26 36		15.6		
13 36.4 +28 00		15.7		
13 36.4 +30 44		15.6		
13 36.4 +31 31		15.1		compact
13 36.6 +31 38		15.0		
13 36.8 +32 25		15.7		diffuse
13 36.9 +29 13		15.4		
13 37.1 +31 15	5259	15.2		double system
13 37.1 +31 28		15.3		
13 37.2 +28 11		15.3		double system
13 37.2 +29 37		15.7		
13 37.2 +31 34		15.5		
13 37.3 +30 15		15.7		
13 37.4 +28 02		14.9		
13 37.5 +30 23		15.7		
13 37.6 +28 40	5263	14.0		
13 37.7 +30 22		15.4		
13 37.8 +29 24		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 38.0 +26 37		15.6		
13 38.0 +31 39		15.7		
13 38.0 +32 24		15.7		
13 38.9 +30 38		15.3		double system
13 39.4 +30 23	5271	15.4		
13 39.5 +26 38		15.3		double system
13 39.5 +27 16		15.0		
13 39.8 +32 17		15.7		
13 40.1 +30 05	5275	15.4		
13 40.1 +30 06	5274	15.7		compact
13 40.2 +26 45		15.4		
13 40.2 +31 47		15.4		
13 40.3 +30 30		15.5		
13 40.4 +30 13	5277	15.4		
13 40.5 +29 58		15.7		extremely compact
13 40.6 +30 07	5280	15.1		compact
13 40.9 +30 36		14.5		
13 41.1 +30 20	5282	15.0		very compact
13 41.7 +30 16		15.6		
13 42.1 +30 08		15.7		
13 42.1 +30 10		15.6		
13 42.3 +30 35		15.5		
13 42.4 +27 24		15.7		diffuse
13 42.4 +31 28		15.7		
13 42.5 +31 52		15.6		
13 42.6 +31 19		15.6		compact



FIELD No. 162

13^h56^m $+29^o30'$

Survey Plate No. 86

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
18616	13 43 58.7	+ 31 08 52	6.55
18802	13 52 10.3	+ 30 09 38	7.38
18843	13 53 57.3	+ 32 16 33	6.29
18850	13 54 17.2	+ 27 44 11	5.18
19061	14 04 41.3	+ 28 40 31	7.03
19115	14 07 32.9	+ 31 29 26	7.36

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1339.9 + 3030	medium compact	417	11.2	Near	5
1341.6 + 2614	medium compact	694	12.5	Near	2
1343.5 + 2839	medium compact	60	1.3	ED	4
1343.8 + 3100	medium compact	124	2.8	VD	6
1344.6 + 3015	medium compact	125	1.5	VD	81
1344.9 + 3143	medium compact	111	1.6	ED	47
1345.6 + 3105	compact	102	1.2	ED	48
1346.1 + 3230	medium compact	162	2.8	D	1
1346.2 + 2814	compact	320	8.4	Near	3
1346.4 + 3124	medium compact	134	1.3	ED	27
1346.9 + 2655	compact	280	4.5	MD	14
1347.4 + 3029	compact	97	1.0	ED	46
1348.7 + 3109	compact	80	0.9	ED	45
1349.4 + 2945	medium compact	308	6.7	MD	80
1350.0 + 2646	medium compact	83	2.8	D	18
1350.0 + 3148	open	73	1.6	VD	44
1351.0 + 2731	medium compact	66	1.0	ED	8
1351.3 + 3156	open	69	1.6	ED	21
1351.7 + 2852	compact	116	2.2	VD	78
1352.0 + 3107	open	105	5.4	Near	42
1352.0 + 3212	compact	103	1.1	ED	20
1352.7 + 2935	compact	100	1.4	ED	77
1352.9 + 2625	open	104	2.7	D	7
1353.1 + 3010	medium compact	87	1.0	ED	79
1353.2 + 2711	medium compact	484	4.9	VD	76
1353.2 + 3207	open	91	1.4	ED	19
1353.6 + 3107	medium compact	149	2.2	ED	43
1354.1 + 3142	medium compact	91	2.3	VD	41
1354.4 + 3234	medium compact	184	1.7	ED	17
1355.6 + 3052	medium compact	274	2.3	ED	40
1356.1 + 2654	compact	105	1.7	ED	75
1356.4 + 2912	compact	47	0.4	ED	74
1356.8 + 3006	medium compact	106	2.0	ED	68
1356.8 + 3108	compact	115	1.3	ED	39
1357.1 + 2836	compact	790	13.1	Near	56
1357.2 + 2947	medium compact	82	1.7	VD	69
1357.3 + 2845	compact	56	0.6	ED	72
1357.5 + 2913	medium compact	57	0.7	ED	73
1357.6 + 3244	open	122	7.4	Near	16
1358.1 + 2658	medium compact	197	2.1	VD	66
1358.3 + 2847	medium compact	162	1.4	ED	71
1358.6 + 3053	medium compact	123	4.3	MD	38
1358.7 + 3017	medium compact	113	2.7	VD	67
1358.9 + 2735	medium compact	75	1.0	ED	64
1359.3 + 3147	medium compact	110	1.2	ED	37
1359.4 + 2815	compact	59	0.6	ED	70
1359.5 + 2650	medium compact	77	1.8	VD	65
1359.6 + 2727	medium compact	105	2.5	VD	63
1401.2 + 2721	medium compact	125	1.4	ED	62
1401.9 + 3218	compact	70	0.9	ED	15
1402.0 + 2704	open	109	4.5	D	60
1402.0 + 3105	medium compact	185	4.9	D	23
1402.5 + 2743	medium compact	167	1.7	ED	61
1402.6 + 3227	compact	84	1.1	ED	13
1403.1 + 3004	compact	190	1.6	ED	36
1403.8 + 2841	medium compact	55	0.8	ED	55
1404.0 + 2650	medium compact	106	1.1	ED	59

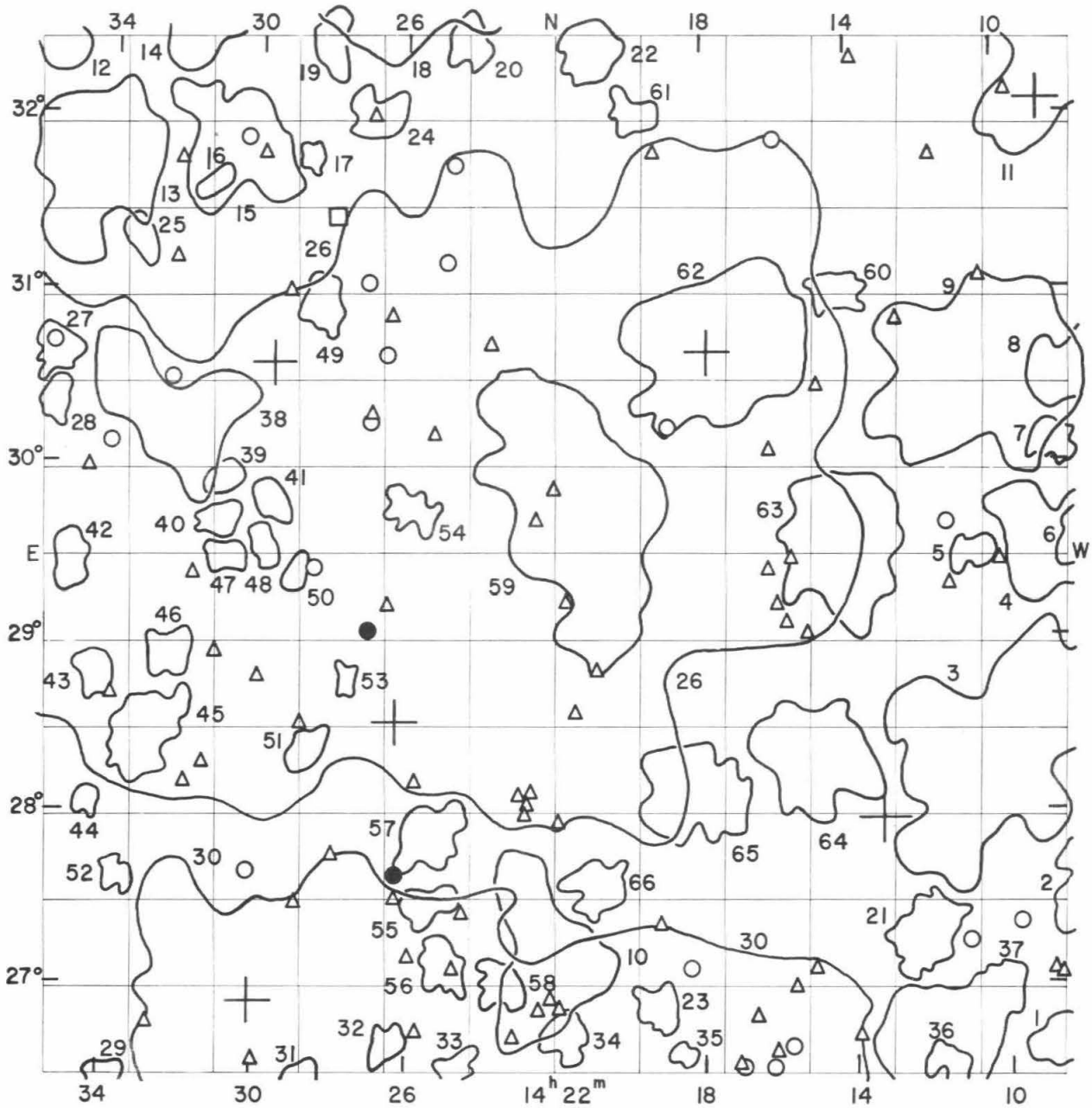
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1404.0 + 2956	compact	77	0.9	ED	35
1404.1 + 3029	medium compact	161	1.8	VD	31
1404.2 + 2855	open	103	3.9	D	54
1404.5 + 2737	medium compact	279	3.2	ED	58
1404.7 + 2616	open	135	3.5	D	9
1404.8 + 2802	medium compact	81	1.4	ED	57
1404.8 + 2958	compact	94	1.1	ED	34
1405.6 + 2815	medium compact	68	2.0	VD	52
1405.8 + 2955	compact	87	0.9	ED	32
1405.8 + 3030	medium compact	74	1.5	ED	33
1406.0 + 2828	medium compact	129	1.4	ED	53
1406.5 + 3150	compact	87	1.1	ED	12
1406.8 + 2756	compact	96	1.1	ED	51
1407.0 + 3118	compact	140	1.6	ED	22
1407.4 + 2730	medium compact	106	3.3	D	50
1407.4 + 2936	medium compact	137	2.1	ED	30
1407.5 + 3216	open	125	5.0	D	11
1407.8 + 3032	open	140	2.7	VD	25
1408.4 + 3006	medium compact	82	1.4	ED	26
1408.5 + 2640	medium compact	107	1.7	VD	49
1408.6 + 2931	open	135	3.4	D	29
1410.0 + 2509	open	199	8.1	Near	10
1410.1 + 2820	medium compact	291	6.6	MD	28
1410.3 + 3030	open	122	6.0	MD	24

Average number of galaxies per cluster = 144.9

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
13 42.3 + 30 35		15.5		
13 42.4 + 31 28		15.7		
13 42.5 + 31 52		15.6		
13 42.6 + 31 19		15.6		compact
13 43.5 + 27 01		15.5		
13 44.9 + 29 46		15.6		
13 45.0 + 30 35		14.8		
13 46.3 + 28 29		15.3		double system
13 46.3 + 31 43		15.5		system with jets
13 46.5 + 26 50		15.5		
13 47.0 + 28 22		15.6		
13 47.0 + 29 51		15.7		very compact
13 47.3 + 29 13		15.7		compact
13 47.5 + 29 56	4334*	15.4		very compact
13 48.2 + 28 24		14.9		
13 48.2 + 29 37		15.3		
13 48.8 + 29 49		15.7		
13 49.4 + 29 35		15.4		
13 49.4 + 32 21		15.6		
13 49.7 + 29 18		15.6		
13 50.0 + 31 42		15.6		
13 50.7 + 32 03		15.4		compact
13 51.8 + 31 05		15.2		
13 51.8 + 31 08		15.5		
13 51.9 + 31 20		15.7		system with jets
13 52.1 + 31 10		15.4		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m ° ′				
13 52.9 +31 31		15.5		diffuse
13 53.8 +29 15		15.7		
13 53.8 +29 55		15.4		diffuse
13 53.8 +30 20		15.6		double system
13 53.9 +28 47		15.4		compact
13 54.0 +28 46		15.7		
13 54.1 +28 46		15.6		
13 54.3 +28 45		15.5		
13 54.5 +29 25	5375	13.2		
13 54.9 +29 02		15.2		double system
13 55.8 +28 40	4355*	15.0		
13 56.3 +29 06		15.5		double system
13 56.8 +28 16		15.6		
13 56.8 +28 18		15.6		
13 56.9 +28 13		15.7		
13 57.1 +30 19		15.6		
13 57.2 +30 20		15.5		
13 57.3 +28 19		15.3		
13 58.1 +28 01		15.5		
13 58.5 +30 19		15.1		
13 58.5 +32 08	4357*	14.9		
13 58.7 +29 48		15.3		
13 58.8 +29 46		15.1		
13 58.9 +32 05		15.6		
13 59.2 +28 32		15.5		
13 59.5 +28 48		15.5		very compact
14 00.7 +28 16		14.7		
14 01.1 +30 06		15.6		
14 01.5 +32 14		15.7		
14 02.3 +28 09		15.3		
14 02.3 +29 26		15.5		
14 02.4 +28 50		15.4		
14 02.5 +30 59		15.5		
14 02.6 +31 18		15.4		
14 03.0 +31 02		15.7		very diffuse spiral
14 03.2 +31 00		15.5		
14 05.7 +30 07		15.2		
14 06.5 +27 30		15.7		
14 07.6 +26 34		15.7		
14 08.6 +27 03		15.5		compact
14 08.8 +27 04		15.7		
14 09.6 +32 09		15.4		



FIELD No. 163

14^h22^m $+29^o30'$

Survey Plate No. 70

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19140	14 08 46.4	+ 32 06 31	7.9
19237	14 13 12.2	+ 27 57 56	7.16
19345	14 17 57.4	+ 30 39 28	6.34
19522	14 26 21.2	+ 28 30 48	6.95
19597	14 29 40.5	+ 30 35 24	3.78
19608	14 30 07.4	+ 26 53 51	5.90

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1407.4 + 2730	medium compact	106	3.3	D	2
1407.4 + 2936	medium compact	137	2.1	ED	6
1407.5 + 3216	open	125	5.0	D	11
1407.8 + 3032	open	140	2.7	VD	8
1408.4 + 3006	medium compact	82	1.4	ED	7
1408.5 + 2640	medium compact	107	1.7	VD	1
1408.6 + 2931	open	135	3.4	D	4
1410.1 + 2820	medium compact	291	6.6	MD	3
1410.3 + 3030	open	122	6.0	MD	9
1410.7 + 2929	compact	121	1.2	ED	5
1411.5 + 2635	open	138	4.7	D	37
1411.6 + 2631	medium compact	114	1.4	ED	36
1412.0 + 2717	medium compact	169	2.3	VD	21
1414.1 + 2932	medium compact	126	4.2	D	63
1414.2 + 3059	compact	170	1.4	VD	60
1415.0 + 2819	medium compact	162	3.6	D	64
1417.5 + 3041	medium compact	144	5.2	MD	62
1418.2 + 2808	medium compact	107	2.9	D	65
1418.6 + 2637	compact	71	0.7	ED	35
1419.2 + 2653	compact	104	1.4	ED	23
1419.8 + 3201	open	111	1.3	ED	61
1420.7 + 2735	medium compact	60	1.7	VD	66
1421.0 + 3224	medium compact	96	2.1	VD	22
1421.2 + 2944	medium compact	170	6.3	MD	59
1421.7 + 2642	compact	206	1.4	VD	34
1422.0 + 2710	medium compact	138	4.2	MD	10
1423.4 + 2700	compact	151	1.5	VD	58
1424.0 + 2613	medium compact	450	18.2	Near	30
1424.3 + 3227	compact	202	1.5	ED	20
1424.6 + 2632	medium compact	109	1.1	ED	33
1424.9 + 2707	compact	135	1.5	VD	56
1425.3 + 2728	compact	123	1.4	ED	55
1425.3 + 2751	medium compact	106	2.1	ED	57
1425.6 + 3305	medium compact	302	6.5	D	18
1425.8 + 2945	medium compact	119	1.5	ED	54
1426.5 + 2640	medium compact	77	1.2	ED	32
1426.8 + 2947	open	603	24.7	Near	26
1426.9 + 3200	medium compact	89	1.7	VD	24
1427.7 + 2846	medium compact	72	1.0	ED	53
1428.0 + 3225	open	120	1.6	VD	19
1428.2 + 3054	medium compact	134	1.5	ED	49
1428.5 + 2822	medium compact	92	1.3	VD	51
1428.6 + 2629	medium compact	77	1.0	ED	31
1428.6 + 3146	compact	101	0.8	ED	17
1429.0 + 2922	compact	82	1.0	ED	50
1429.6 + 2947	compact	116	1.2	ED	41
1429.8 + 2931	medium compact	79	1.1	ED	48
1430.6 + 3150	medium compact	152	3.8	MD	15
1430.9 + 2928	medium compact	117	1.2	ED	47
1430.9 + 2955	medium compact	110	1.1	ED	39
1431.0 + 2940	compact	214	1.2	ED	40
1431.2 + 3137	medium compact	117	1.0	ED	16
1431.8 + 3235	open	114	2.9	VD	14
1432.3 + 2854	compact	134	1.5	VD	46
1432.4 + 3017	medium compact	163	4.1	D	38
1432.9 + 2826	open	132	2.5	VD	45
1433.2 + 3116	medium compact	97	1.2	ED	25

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1433.6 + 2739	medium compact	96	1.1	ED	52
1434.0 + 2625	medium compact	110	1.3	ED	29
1434.2 + 2847	medium compact	159	1.3	ED	43
1434.4 + 2802	medium compact	71	0.9	ED	44
1434.4 + 3143	open	182	4.5	D	13
1435.0 + 2925	medium compact	77	1.5	ED	42
1435.5 + 3037	compact	180	1.5	VD	27
1435.6 + 3020	compact	240	1.1	ED	28
1436.4 + 3252	open	197	5.4	D	12

Average number of galaxies per cluster = 143.2

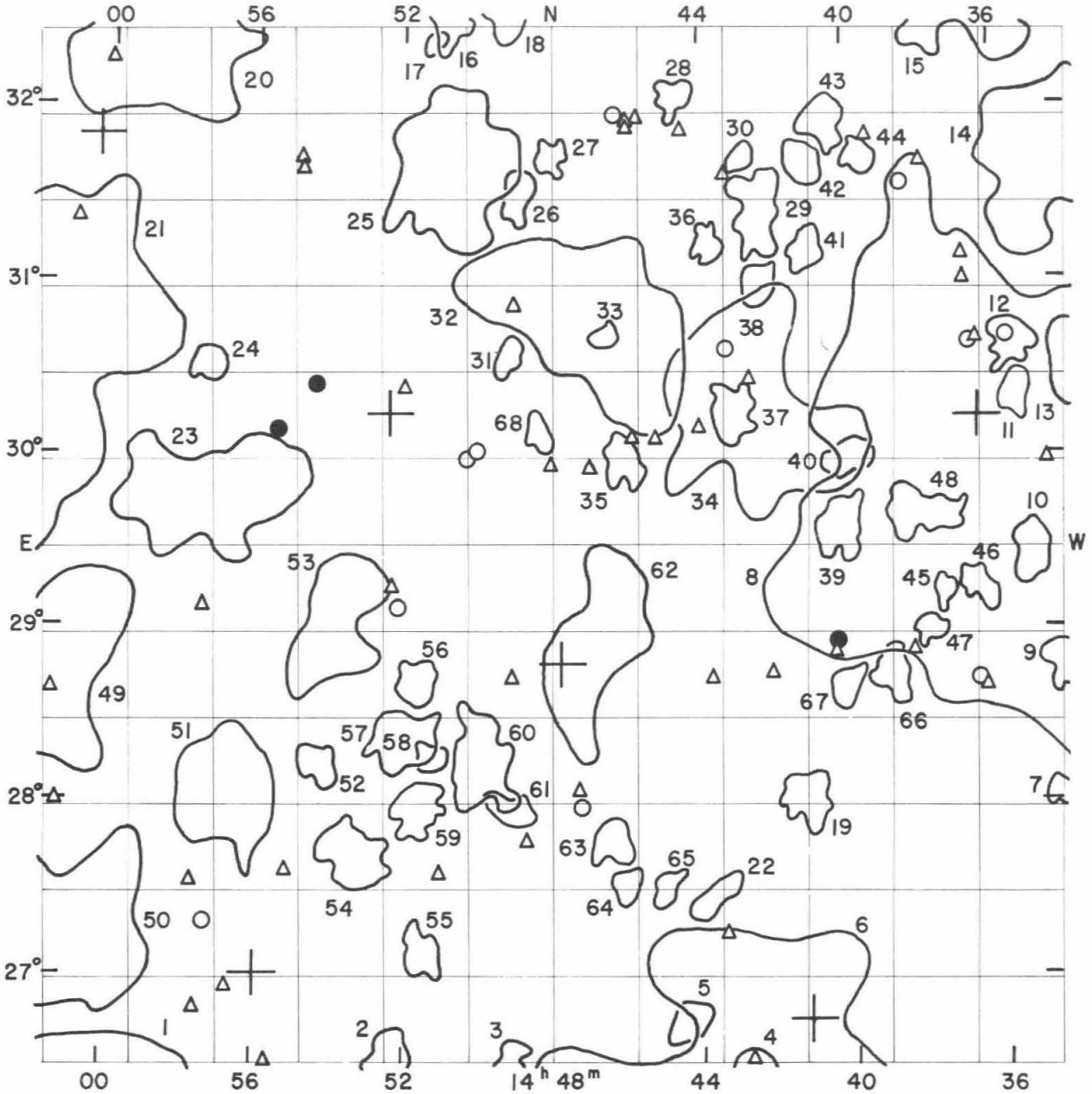
GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
14 08.6 + 27 03		15.5		compact
14 08.8 + 27 04		15.7		
14 09.6 + 27 21	4384*	15.0		
14 09.6 + 32 09		15.4		
14 10.0 + 29 26		15.6		
14 10.4 + 31 05	5512	15.3		
14 11.0 + 27 15		14.7		
14 11.4 + 29 18		15.7		
14 11.5 + 29 40		14.8		
14 11.7 + 31 48		15.5		
14 12.8 + 30 50		15.5		
14 13.8 + 32 21		15.4		very compact
14 13.9 + 26 42		15.5		
14 14.9 + 30 28		15.7		diffuse
14 15.0 + 27 05	4395*	15.1		
14 15.2 + 29 02	4396*	15.6		double system
14 15.6 + 26 59		15.6		diffuse
14 15.7 + 26 39	4397*	14.2		
14 15.7 + 29 28		15.6		
14 15.8 + 29 06	4398*	15.3		
14 16.0 + 29 12		15.6		
14 16.1 + 26 37	4399*	15.5		
14 16.1 + 31 53	4403*	14.9		
14 16.2 + 26 31	5553	14.8		
14 16.2 + 30 05		15.6		
14 16.3 + 29 24		15.4		
14 16.6 + 26 50		15.4		
14 16.9 + 26 32	4405*	14.9		
14 17.0 + 26 32		15.7		
14 18.3 + 27 05		15.0		
14 19.0 + 30 13	4408*	15.0		
14 19.1 + 27 21		15.6		diffuse
14 19.3 + 31 49	4409*	15.1		
14 20.8 + 28 50		15.7		
14 21.4 + 28 35	4414*	15.2		
14 21.7 + 29 13		15.5		very compact
14 21.9 + 26 52		15.7		
14 21.9 + 27 56		15.4		
14 22.0 + 29 52		15.7		compact
14 22.1 + 26 55		15.7		
14 22.4 + 26 51		15.6		

Position α 1950 h m	Position δ ° ′	NGC IC*	m_p	V_s km/sec	Remarks
14 22.5	+ 29 41		15.6		
14 22.6	+ 28 07		15.6		diffuse spiral
14 22.7	+ 28 03		15.5		
14 22.8	+ 27 59		15.6		
14 23.0	+ 28 05		15.7		
14 23.1	+ 26 42		15.5		
14 23.7	+ 30 42	4422*	15.3		compact
14 24.5	+ 27 25	4425*	15.3		
14 24.7	+ 27 06	4427*	15.4		
14 24.7	+ 31 45		14.7		
14 24.9	+ 31 10	1012*=4431*	14.8		
14 25.2	+ 30 10		15.4		
14 25.7	+ 26 44	4436*	15.2		
14 25.8	+ 28 10		15.7		
14 25.9	+ 27 10		15.5		
14 26.3	+ 27 29		15.3		
14 26.3	+ 27 38	5635	13.9		
14 26.4	+ 30 51		15.5		
14 26.5	+ 29 12	4442*	15.2		
14 26.6	+ 30 38		14.6		
14 26.9	+ 30 18		15.5		
14 27.0	+ 29 03	5641	13.6		m_H = 13.1
14 27.0	+ 30 15	5642	14.3		
14 27.0	+ 32 00		15.6		
14 27.1	+ 31 03	4447*	14.7		
14 27.9	+ 27 45		15.1		
14 27.9	+ 31 26	5653	12.7	+ 3557	m_H = 12.9 E
14 28.5	+ 29 24	5657	14.4		
14 28.8	+ 28 30		15.1		
14 28.9	+ 27 27		15.2		
14 29.1	+ 31 00		15.5		
14 29.9	+ 28 46	4450*	15.4		
14 29.9	+ 31 48		15.5		
14 30.0	+ 26 33		15.7		
14 30.2	+ 27 39	4452*	14.9		
14 30.4	+ 31 53	5672	14.5	+ 3701	
14 31.1	+ 28 55		15.5		
14 31.4	+ 28 16		15.3		
14 31.7	+ 29 21		15.7		double nebula
14 31.9	+ 28 10		15.2		
14 32.2	+ 31 46		15.3		
14 32.3	+ 31 11	4459*	15.3		
14 32.4	+ 30 30	4460*	15.0		
14 32.8	+ 26 46	4461*+4462*	15.3		triple system
14 33.9	+ 28 40		15.4		
14 34.0	+ 30 07	5685	14.9		very compact
14 34.6	+ 29 58		15.7		
14 35.6	+ 30 42		15.0		double system, tidal effect

MAGNITUDES AND TYPES FROM OTHER SOURCES

NGC IC*	Bigay 1951		Pettit 1954		Humason, Mayall, Sandage 1956		Holmberg 1958	
5653	-	-	-	-	-	Sc	-	-
5672	-	-	14.04	Sb	14.1	Sb	-	-



FIELD No. 164

14^h48^m $+29^\circ30'$

Survey Plate No. 1390

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
19739	14 36 31.1	+ 30 13 48	7.9
19831	14 41 13.5	+ 26 44 22	4.93
19966	14 47 49.2	+ 28 49 19	5.66
20060	14 52 28.6	+ 30 15 57	6.84
20153	14 56 02.6	+ 27 00 58	7.50
20239	15 00 26.5	+ 31 52 44	6.80

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1426.8 + 2947	open	603	24.7	Near	8
1432.4 + 3017	medium compact	163	4.1	D	13
1434.2 + 2847	medium compact	159	1.3	ED	9
1434.4 + 2802	medium compact	71	0.9	ED	7
1434.4 + 3143	open	182	4.5	D	14
1435.0 + 2925	medium compact	77	1.5	ED	10
1435.5 + 3037	compact	180	1.5	VD	12
1435.6 + 3020	compact	240	1.1	ED	11
1436.4 + 3252	open	197	5.4	D	15
1436.5 + 2914	medium compact	115	1.2	ED	46
1437.4 + 2912	compact	74	0.8	ED	45
1437.9 + 2900	medium compact	84	0.9	ED	47
1438.0 + 2940	medium compact	145	1.9	ED	48
1438.9 + 2845	compact	116	1.4	ED	66
1439.5 + 3145	medium compact	94	1.1	ED	44
1439.9 + 3000	compact	119	1.4	ED	40
1440.1 + 2840	medium compact	105	1.2	ED	67
1440.2 + 2935	compact	212	1.8	ED	39
1440.5 + 3155	medium compact	135	1.4	ED	43
1441.0 + 3112	compact	94	1.2	ED	41
1441.1 + 3142	open	117	1.3	ED	42
1441.2 + 2801	compact	157	1.6	ED	19
1442.0 + 2414	medium compact	1413	31.2	Near	6
1442.4 + 3059	open	81	1.2	ED	38
1442.4 + 3125	compact	135	2.0	VD	29
1442.5 + 3015	open	179	5.9	D	34
1442.8 + 2625	compact	145	1.4	ED	4
1442.9 + 3144	compact	97	0.8	ED	30
1443.1 + 3014	medium compact	121	1.6	ED	37
1443.7 + 2727	medium compact	90	1.2	ED	22
1443.8 + 3114	medium compact	102	1.0	ED	36
1444.4 + 2644	medium compact	91	1.2	ED	5
1444.7 + 3205	medium compact	129	1.1	ED	28
1445.0 + 2730	medium compact	83	0.9	ED	65
1446.0 + 2731	compact	90	1.0	ED	64
1446.0 + 2959	medium compact	121	1.4	ED	35
1446.4 + 2747	medium compact	127	1.3	ED	63
1446.5 + 3041	compact	83	0.7	ED	33
1446.8 + 3046	medium compact	191	5.8	MD	32
1446.9 + 2855	open	103	4.0	VD	62
1448.1 + 3144	compact	98	1.0	ED	27
1448.4 + 3009	compact	64	1.0	ED	68
1449.0 + 3130	compact	82	1.3	VD	26
1449.1 + 2757	medium compact	88	1.2	ED	61
1449.2 + 2626	compact	132	1.3	VD	3
1449.2 + 3035	medium compact	85	0.9	ED	31
1449.3 + 3241	medium compact	121	2.0	D	18
1449.9 + 2813	medium compact	99	2.4	VD	60
1450.7 + 3140	open	110	4.2	MD	25
1450.9 + 3233	medium compact	76	1.6	VD	16
1451.2 + 3224	compact	70	0.7	ED	17
1451.3 + 2815	medium compact	68	0.9	ED	58
1451.5 + 2709	medium compact	112	1.3	ED	55
1451.6 + 2758	medium compact	88	1.7	ED	59
1451.7 + 2842	medium compact	105	1.3	ED	56
1452.0 + 2821	medium compact	74	1.9	VD	57
1452.5 + 2631	medium compact	150	1.4	ED	2

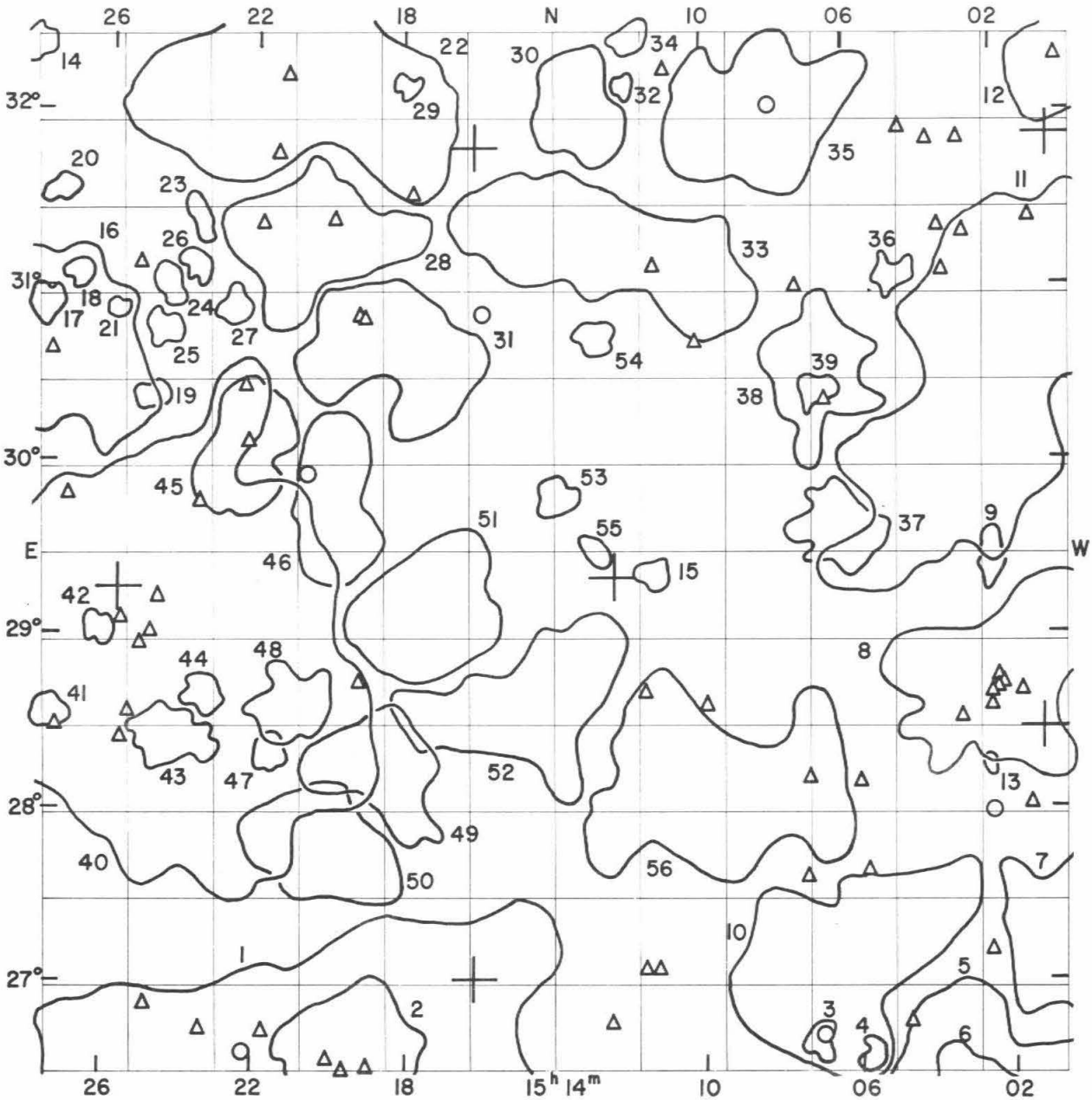
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1453.4 + 2742	medium compact	100	2.0	VD	54
1453.9 + 2901	medium compact	95	3.2	D	53
1454.3 + 2813	medium compact	102	1.2	ED	52
1456.7 + 2803	medium compact	103	3.6	D	51
1457.1 + 2946	medium compact	116	4.5	MD	23
1457.4 + 3032	compact	110	1.1	ED	24
1458.9 + 3218	medium compact	165	4.8	MD	20
1500.3 + 2715	medium compact	131	4.6	MD	50
1500.6 + 2559	open	259	9.8	Near	1
1502.0 + 2841	compact	162	5.9	Near	49
1502.2 + 3024	open	219	9.0	MD	21

Average number of galaxies per cluster = 147.1

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
14 34.6 + 29 58		15.7		
14 35.6 + 30 42		15.0		double system, tidal effect
14 36.3 + 28 40	4477*	15.5		
14 36.4 + 30 41	5706	15.7		
14 36.5 + 28 43	4479*	14.8		
14 36.6 + 30 39	5709	14.5		
14 36.8 + 31 01		15.5		
14 36.8 + 31 10		15.3		
14 37.9 + 31 43		15.2		
14 38.2 + 28 53	4485*	15.7		
14 38.4 + 31 35		14.9		
14 39.3 + 31 51		15.3		
14 40.2 + 28 56	5735	13.8		
14 40.3 + 28 52		15.7		
14 42.1 + 28 45	4497*	15.1		
14 42.7 + 26 30	4498*	15.1		
14 42.7 + 30 27		15.7		
14 43.2 + 30 38		15.0		
14 43.3 + 27 15		15.4		
14 43.3 + 31 39		15.3		double nebula in halo
14 43.6 + 28 44		15.4		
14 44.0 + 30 10		15.7		very compact
14 44.4 + 31 55	4504*	15.4		
14 45.2 + 30 07		15.7		
14 45.7 + 31 59	4508*	15.3		double system
14 45.8 + 30 07		15.6		double nebula
14 46.0 + 31 55		15.6		
14 46.0 + 31 57		15.7		extremely compact
14 46.3 + 32 00	4509*	14.7		
14 46.9 + 29 57		15.7		
14 47.1 + 27 59		15.0		double system
14 47.2 + 28 05		15.5		
14 48.0 + 29 58		15.6		double system
14 48.7 + 27 46	4514*	15.3		
14 49.1 + 28 44		15.7		
14 49.1 + 30 54		15.6		
14 50.0 + 30 03	5771	14.6		
14 50.3 + 30 00	5773	14.5		
14 51.0 + 27 36		15.6		

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
14 52.0	+ 30 25		15.3		
14 52.2	+ 29 09	5780	14.7		
14 52.3	+ 29 16		15.6		
14 54.4	+ 30 25	5789	13.9		
14 54.8	+ 31 41		15.5		
14 54.9	+ 31 45		15.6		very compact
14 55.2	+ 27 37		15.5		
14 55.5	+ 30 10	5798	13.5		
14 55.7	+ 26 30		15.6		
14 56.7	+ 26 56		15.4		diffuse
14 57.3	+ 27 19		14.9		
14 57.5	+ 26 49		15.5		
14 57.5	+ 29 08		15.7		
14 57.7	+ 27 32		15.7		
15 00.1	+ 32 19		15.4		compact
15 01.0	+ 31 23		15.7		
15 01.3	+ 28 00		15.7		
15 01.5	+ 28 40		15.7		triple system



FIELD No. 165

15^h14^m $+29^\circ30'$

Survey Plate No. 1092

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
20239	15 00 26.5	+ 31 52 44	6.80
20250	15 00 58.3	+ 28 27 44	6.90
20495	15 12 23.6	+ 29 20 56	5.26
20574	15 16 08.9	+ 31 49 43	var.
20576	15 16 11.8	+ 27 01 15	6.55
20795	15 25 46.0	+ 29 16 37	3.72

CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1458.9 + 3218	medium compact	165	4.8	MD	12
1500.3 + 2715	medium compact	131	4.6	MD	7
1500.6 + 2559	open	259	9.8	Near	5
1502.0 + 2841	compact	162	5.9	Near	8
1502.2 + 2925	medium compact	102	1.3	VD	9
1502.2 + 3024	open	219	9.0	MD	11
1502.3 + 2814	compact	56	0.4	ED	13
1502.8 + 2613	medium compact	118	3.6	D	6
1504.7 + 3104	medium compact	128	1.1	ED	36
1505.6 + 2635	compact	82	0.9	ED	4
1506.3 + 2703	medium compact	201	6.4	MD	10
1506.3 + 2937	medium compact	94	2.4	D	37
1506.8 + 3032	medium compact	115	3.8	MD	38
1506.9 + 2640	compact	86	0.9	ED	3
1506.9 + 3025	compact	119	1.1	ED	39
1508.4 + 3200	open	113	5.0	D	35
1509.5 + 2805	medium compact	214	6.5	D	56
1511.3 + 2922	medium compact	69	1.1	ED	15
1511.9 + 3227	medium compact	86	1.1	ED	34
1512.1 + 3210	compact	62	0.7	ED	32
1512.3 + 3115	medium compact	182	6.0	D	33
1512.8 + 2929	compact	58	0.9	ED	55
1512.8 + 3044	medium compact	101	1.1	ED	54
1513.2 + 3203	compact	106	3.1	D	30
1513.9 + 2949	medium compact	107	1.3	ED	53
1514.6 + 2837	medium compact	209	5.1	MD	52
1517.3 + 2910	medium compact	230	4.5	MD	51
1518.0 + 3210	compact	73	0.8	ED	29
1518.2 + 3040	compact	213	4.8	Near	31
1518.5 + 2814	medium compact	166	3.7	MD	49
1519.3 + 2631	open	112	4.5	D	2
1519.4 + 2610	open	396	14.3	Near	1
1519.9 + 2947	medium compact	113	3.7	MD	46
1520.0 + 2748	compact	293	4.1	MD	50*
1520.5 + 3116	medium compact	285	4.8	MD	28
1520.8 + 3207	medium compact	275	7.5	MD	22
1521.0 + 2835	medium compact	98	2.2	VD	48
1521.6 + 2819	medium compact	126	1.1	ED	47
1522.3 + 3005	compact	205	3.6	MD	45
1522.6 + 3054	medium compact	60	1.1	ED	27
1523.4 + 2839	medium compact	98	1.3	ED	44
1523.6 + 3123	medium compact	68	1.0	ED	23
1523.7 + 3108	medium compact	92	1.0	ED	26
1524.2 + 2825	medium compact	112	2.1	VD	43
1524.4 + 3100	medium compact	104	1.1	ED	24
1524.5 + 3046	medium compact	88	1.1	VD	25
1524.8 + 2850	compact	984	13.4	Near	40
1524.9 + 3022	compact	82	1.0	ED	19
1525.8 + 3053	compact	62	0.6	ED	21
1526.2 + 2902	compact	90	0.9	ED	42
1526.9 + 3105	compact	59	0.9	ED	18
1527.0 + 3040	open	120	5.6	MD	16
1527.5 + 2833	medium compact	100	1.1	ED	41
1527.5 + 3134	medium compact	90	0.9	ED	20
1527.8 + 3055	compact	109	1.2	VD	17
1529.0 + 3220	medium compact	130	1.9	VD	14

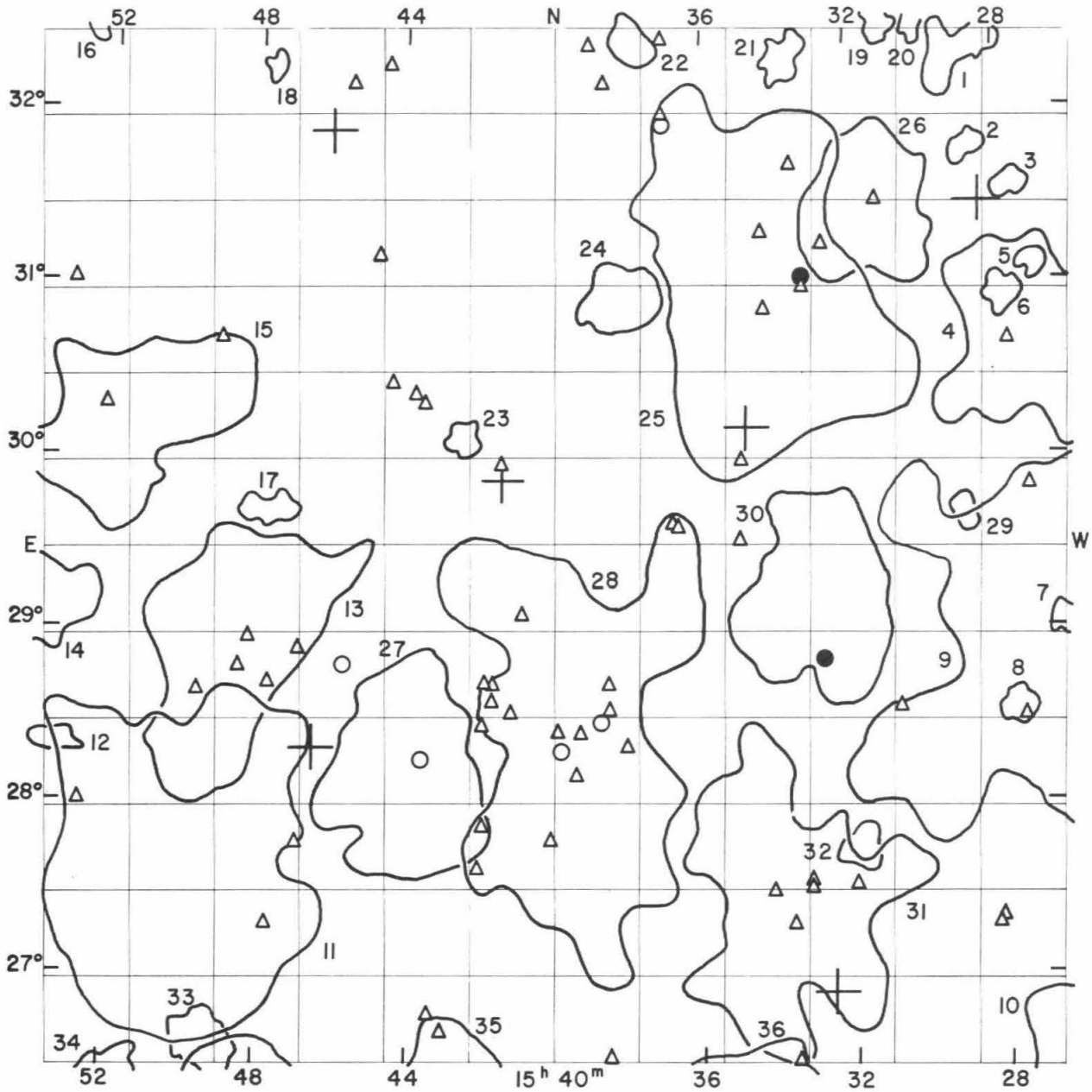
Average number of galaxies per cluster = 149.6

*Cluster No. 50 is the Corona Borealis Cluster of galaxies.

GALAXIES

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
15 00.1	+ 32 19		15.4		compact
15 01.0	+ 31 23		15.7		
15 01.3	+ 28 00		15.7		
15 01.5	+ 28 40		15.7		triple system
15 01.9	+ 28 43		15.5		compact
15 02.1	+ 28 42		15.3		triple system
15 02.1	+ 28 46		15.6		compact
15 02.2	+ 28 35		15.7		
15 02.2	+ 28 40		15.7		
15 02.3	+ 28 00	4533*	14.9		
15 02.5	+ 27 11		15.3		
15 02.8	+ 31 19		15.6		
15 02.9	+ 31 52		15.7		diffuse
15 03.1	+ 28 32		15.1		triple system
15 03.4	+ 31 06		15.6		
15 03.5	+ 31 21		15.3		
15 03.8	+ 31 53		15.7		
15 04.5	+ 31 56		15.7		
15 04.6	+ 26 45		15.7		
15 05.6	+ 27 39		15.7		
15 05.8	+ 28 10		15.5		extremely compact
15 06.7	+ 30 22		15.5		
15 06.8	+ 26 43		14.8		
15 07.1	+ 28 11		15.7		
15 07.2	+ 27 37		15.6		very compact
15 07.4	+ 31 01		15.6		
15 08.1	+ 32 05		14.8		
15 09.9	+ 28 37		15.7		extremely compact
15 10.2	+ 30 42		15.6		
15 11.0	+ 32 16		15.7		
15 11.1	+ 27 05		15.6		
15 11.3	+ 31 08		15.4		triple system
15 11.5	+ 27 05		15.7		very compact
15 11.6	+ 28 41		15.7		compact
15 12.4	+ 26 47		15.3		
15 15.9	+ 30 52		14.7		double system
15 17.8	+ 31 33		15.2		
15 19.0	+ 26 31		15.6		
15 19.0	+ 30 50		15.5		
15 19.2	+ 28 44		15.3		
15 19.2	+ 30 51		15.7		compact
15 19.6	+ 26 30		15.7		
15 19.9	+ 31 24	5924	15.3		
15 20.0	+ 26 35		15.5		
15 20.7	+ 29 57		14.9		
15 21.2	+ 32 15		15.7		compact
15 21.5	+ 31 47		15.6		
15 21.8	+ 26 44		15.6		
15 21.9	+ 31 23		15.7		
15 22.2	+ 26 37		15.0		double system
15 22.2	+ 30 08		15.6		system with jet
15 22.3	+ 30 27		15.4		
15 23.4	+ 26 44		15.1		double system
15 23.6	+ 29 46		15.2		compact
15 24.7	+ 29 14		15.7		
15 24.9	+ 26 53		15.2		compact

Position α 1950 h m	Position δ o '	NGC IC*	m_p	V_s km/sec	Remarks
15 24.9	+ 29 01	4546*	15.2		
15 25.2	+ 28 58	4547*	15.4		
15 25.2	+ 31 08		15.6		
15 25.4	+ 28 34		15.7		
15 25.6	+ 28 24		15.5		
15 25.7	+ 29 05		15.4		chain of 3 galaxies
15 27.1	+ 29 49		15.7		
15 27.4	+ 28 29		15.6		
15 27.7	+ 30 39		15.1		very compact



FIELD No. 166

15^h40^m $+29^\circ30'$

Survey Plate No. 121

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	° ′ ″	
20848	15 28 21.3	+ 31 27 22	6.35
20947	15 32 34.2	+ 26 52 54	2.31
21004	15 34 50.6	+ 30 09 20	6.52
21152	15 41 24.8	+ 29 51 21	8.21
21247	15 46 02.8	+ 31 53 19	6.56
21257	15 46 30.7	+ 28 18 32	var.

CLUSTERS OF GALAXIES

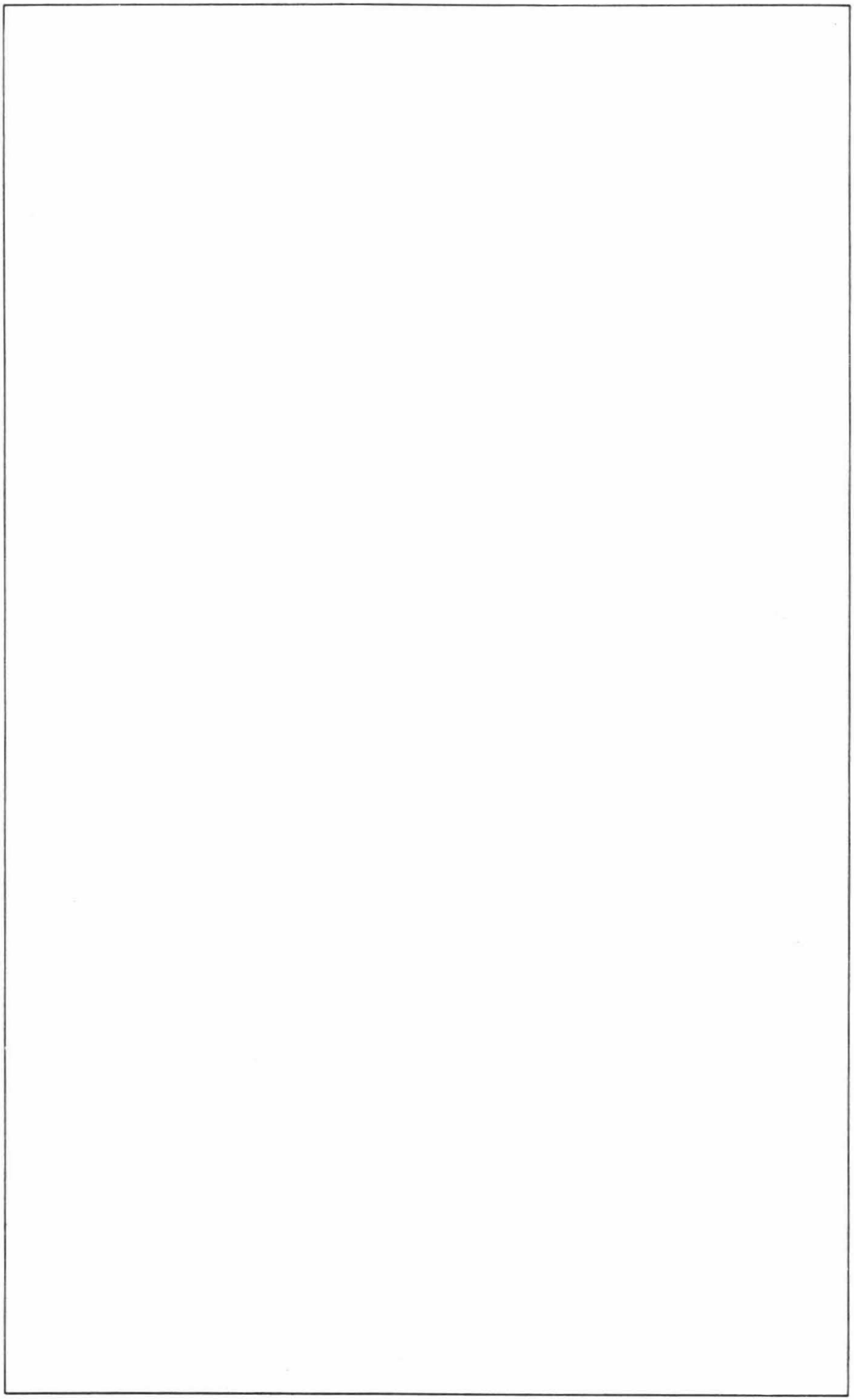
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1519.4 + 2610	open	396	14.3	Near	10
1524.8 + 2850	compact	984	13.4	Near	9
1526.2 + 2902	compact	90	0.9	ED	7
1526.9 + 3105	compact	59	0.9	ED	5
1527.0 + 3040	open	120	5.6	MD	4
1527.5 + 2833	medium compact	100	1.1	ED	8
1527.5 + 3134	medium compact	90	0.9	ED	3
1527.8 + 3055	compact	109	1.2	VD	6
1528.7 + 3147	compact	55	0.9	ED	2
1528.9 + 2940	compact	87	0.9	ED	29
1529.0 + 3220	medium compact	130	1.9	VD	1
1530.1 + 3231	medium compact	90	1.0	ED	20
1531.0 + 3230	compact	80	1.1	ED	19
1531.4 + 3127	medium compact	161	4.6	MD	26
1531.8 + 2744	compact	92	1.3	ED	32
1532.9 + 2912	open	154	5.5	D	30
1533.5 + 2724	medium compact	151	7.5	Near	31
1533.7 + 3218	compact	125	1.4	ED	21
1534.4 + 2553	open	122	6.0	Near	36
1534.4 + 3100	open	196	9.1	Near	25
1537.9 + 3224	medium compact	110	1.4	ED	22
1538.1 + 3055	medium compact	104	2.3	VD	24
1539.1 + 2820	medium compact	241	9.5	Near	28
1542.5 + 3006	compact	90	1.1	ED	23
1543.9 + 2808	medium compact	193	5.8	MD	27
1544.4 + 2543	medium compact	240	11.2	Near	35
1547.7 + 2941	open	109	1.2	ED	17
1547.7 + 3215	compact	·59	0.7	ED	18
1548.6 + 2855	medium compact	230	6.7	Near	13
1549.2 + 2635	open	80	1.9	VD	33
1550.0 + 2740	medium compact	677	9.7	MD	11
1551.3 + 3013	open	157	5.7	MD	15
1551.8 + 2625	medium compact	101	1.6	VD	34
1552.6 + 3230	compact	75	0.9	ED	16
1553.4 + 2820	medium compact	94	1.0	ED	12
1556.1 + 2829	open	226	8.2	Near	14

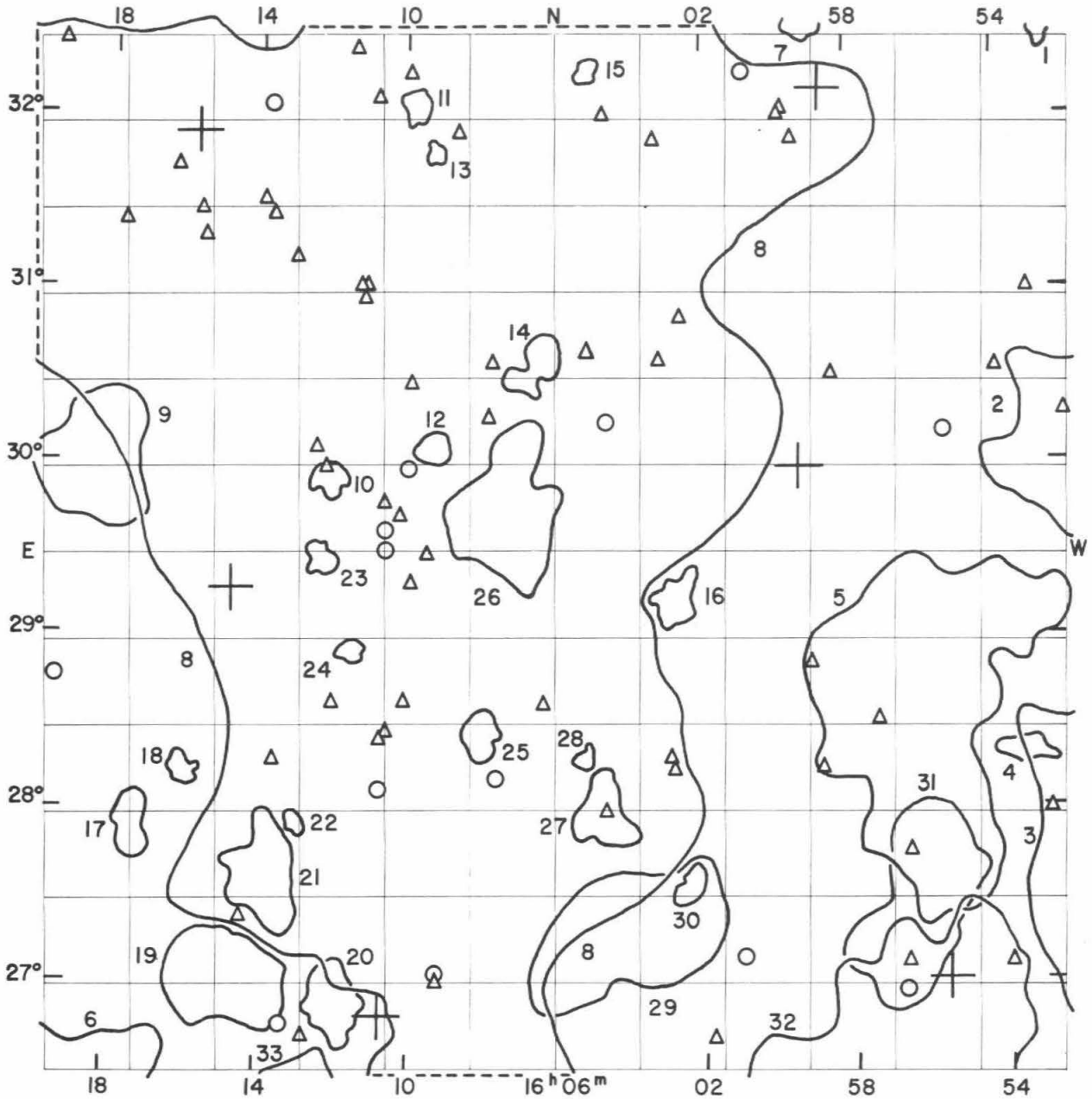
Average number of galaxies per cluster = 171.6

GALAXIES

Position α 1950 δ (h m, o ′)	NGC IC*	m_p	V_s km/sec	Remarks
15 27.1 + 29 49		15.7		
15 27.4 + 28 29		15.6		
15 27.7 + 30 39		15.1		very compact
15 28.1 + 27 18		15.4		
15 28.2 + 27 16		15.3		compact
15 30.7 + 28 32		15.7		
15 31.2 + 31 29		15.6		
15 31.9 + 27 30		15.5		
15 32.7 + 28 50	5958	13.2		
15 32.7 + 31 14		15.5		extremely diffuse spiral
15 33.1 + 27 30		15.2		
15 33.1 + 27 31		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 33.2 +31 01	5961	14.0		
15 33.3 +30 58		15.1		
15 33.5 +26 30		15.6		double nebula
15 33.5 +31 42		15.7		
15 33.6 +27 17		15.6		
15 34.1 +27 29		15.4		
15 34.3 +30 51		15.2		
15 34.4 +31 17		15.2		
15 34.9 +29 59		15.7		
15 35.0 +29 30		15.3		double system
15 36.7 +29 35		15.5		very diffuse
15 36.8 +29 35		15.6		
15 37.0 +31 55	5974	14.3		
15 37.0 +32 25		15.6		
15 37.1 +31 59		15.6		
15 38.0 +28 19	4568*	15.3		
15 38.4 +26 31		15.7		
15 38.4 +28 31		15.2		double system
15 38.4 +28 41		15.6		
15 38.7 +28 28	4569*	15.0		
15 38.7 +32 10		15.6		very compact
15 39.0 +32 23		15.7		
15 39.2 +28 24	4570*	15.1		
15 39.3 +28 09		15.2		very compact
15 39.8 +28 18	4572*	15.0		double system
15 39.9 +28 25	4574*	15.7		
15 40.1 +27 46		15.6		
15 40.8 +29 05		15.7		
15 41.1 +28 31	4580*	15.4		
15 41.4 +29 57		15.7		
15 41.6 +28 41		15.5		
15 41.7 +28 35		15.1		
15 41.9 +27 52		15.3		double system
15 41.9 +28 26	4581*	15.3		
15 41.9 +28 41		15.6		
15 42.0 +27 37		15.4		
15 43.0 +26 40		15.4		
15 43.3 +26 46		15.5		
15 43.5 +30 18		15.4		double system
15 43.6 +28 15	4582*	14.9		
15 43.8 +30 21		15.6		
15 44.3 +30 25		15.2		triple system, bridge
15 44.5 +32 16		15.1		
15 44.7 +31 10		15.3		
15 45.5 +32 10		15.5		
15 45.7 +28 48	6001=6002	14.4		
15 46.8 +28 54		15.6		
15 46.9 +27 46		15.3		
15 47.7 +27 17		15.7		
15 47.7 +28 42		15.4		
15 48.2 +28 57		15.5		
15 48.5 +28 47		15.3		compact
15 49.0 +30 41		15.3		quadruple system
15 49.6 +28 39		15.6		
15 52.1 +30 18		15.3		compact
15 52.7 +28 00		15.5		
15 53.0 +31 00		15.7		double system, connected





FIELD No. 167

16^h06^m $+29^\circ30'$

Survey Plate No. 134

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	° ′ ″	
21440	15 55 30.9	+ 27 01 17	4.22
21520	15 58 46.1	+ 32 10 45	7.31
21534	15 59 26.3	+ 29 59 23	4.91
21811	16 10 41.4	+ 26 47 52	6.37
21900	16 14 44.5	+ 29 16 21	5.73
21924	16 15 48.9	+ 31 55 15	6.93

CLUSTERS OF GALAXIES

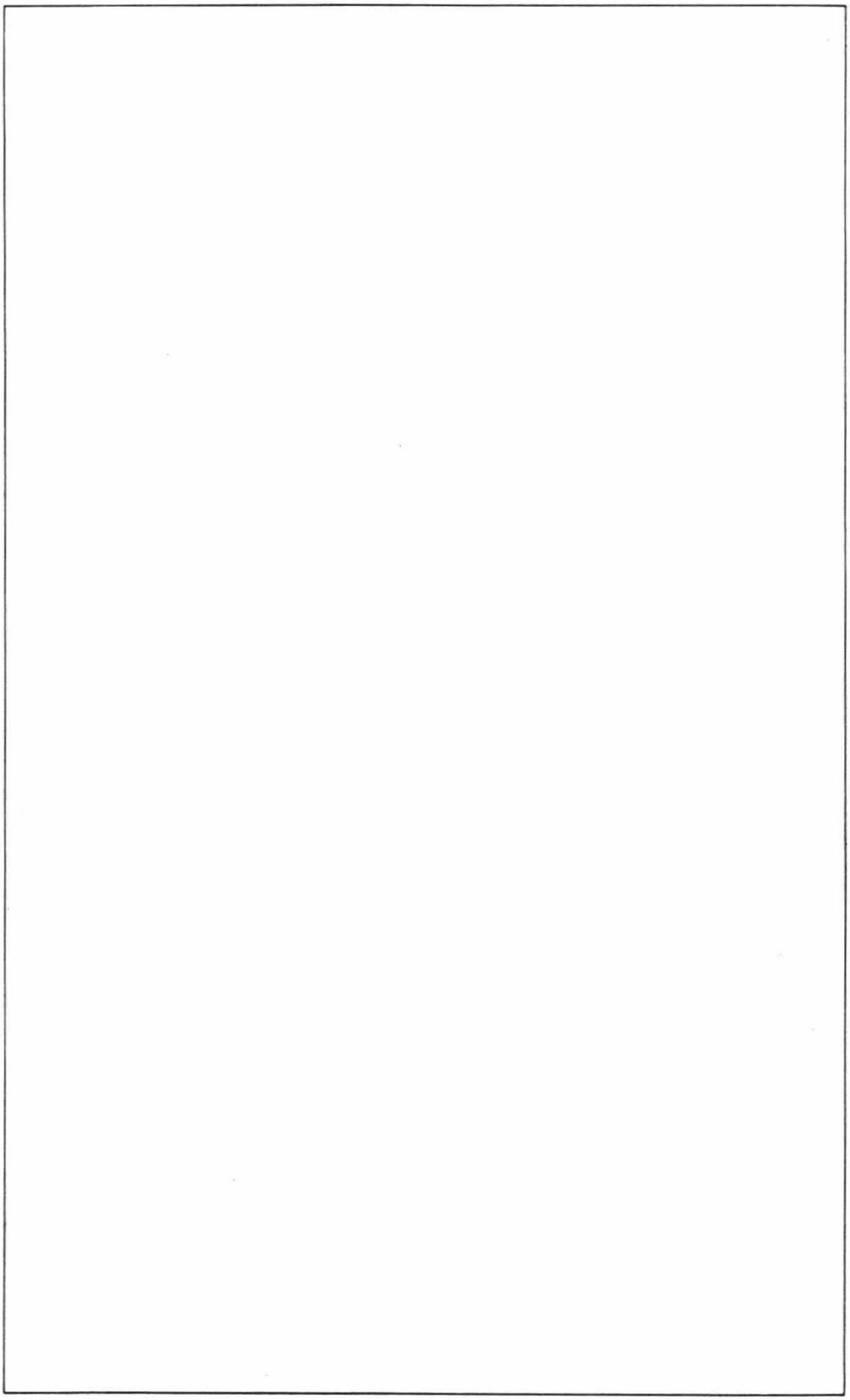
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1550.0 + 2740	medium compact	677	9.7	MD	3
1551.3 + 3013	open	157	5.7	MD	2
1552.6 + 3230	compact	75	0.9	ED	1
1553.4 + 2820	medium compact	94	1.0	ED	4
1556.1 + 2829	open	226	8.2	Near	5
1556.2 + 2725	compact	415	4.6	D	31
1556.8 + 2641	open	298	7.1	MD	32
1559.2 + 3234	medium compact	111	1.1	ED	7
1602.4 + 2734	compact	112	1.0	ED	30
1602.8 + 2913	open	51	1.4	VD	16
1604.0 + 2717	open	116	5.1	D	29
1604.7 + 2758	medium compact	93	2.0	VD	27
1605.2 + 2818	compact	54	0.6	ED	28
1605.2 + 3216	compact	60	0.7	ED	15
1606.5 + 3033	medium compact	111	1.6	VD	14
1607.3 + 2943	open	106	3.9	VD	26
1608.0 + 2826	compact	99	1.3	ED	25
1608.5 + 3044	medium compact	1775	31.8	Near	8
1609.3 + 3148	compact	51	0.5	ED	13
1609.4 + 3006	compact	119	1.0	ED	12
1609.8 + 3204	medium compact	91	1.0	ED	11
1611.5 + 2855	medium compact	62	0.7	ED	24
1611.9 + 2653	compact	250	2.0	ED	20
1612.0 + 2955	compact	102	1.1	ED	10
1612.4 + 2927	medium compact	69	0.9	ED	23
1612.7 + 2624	medium compact	77	2.3	VD	33
1613.0 + 2755	compact	58	0.6	ED	22
1613.8 + 2737	medium compact	65	2.6	D	21
1614.6 + 2701	open	96	3.6	D	19
1616.0 + 2814	medium compact	76	0.8	ED	18
1617.4 + 2755	medium compact	73	1.5	ED	17
1618.4 + 3000	compact	193	3.8	D	9
1619.9 + 2558	medium compact	479	10.0	MD	6

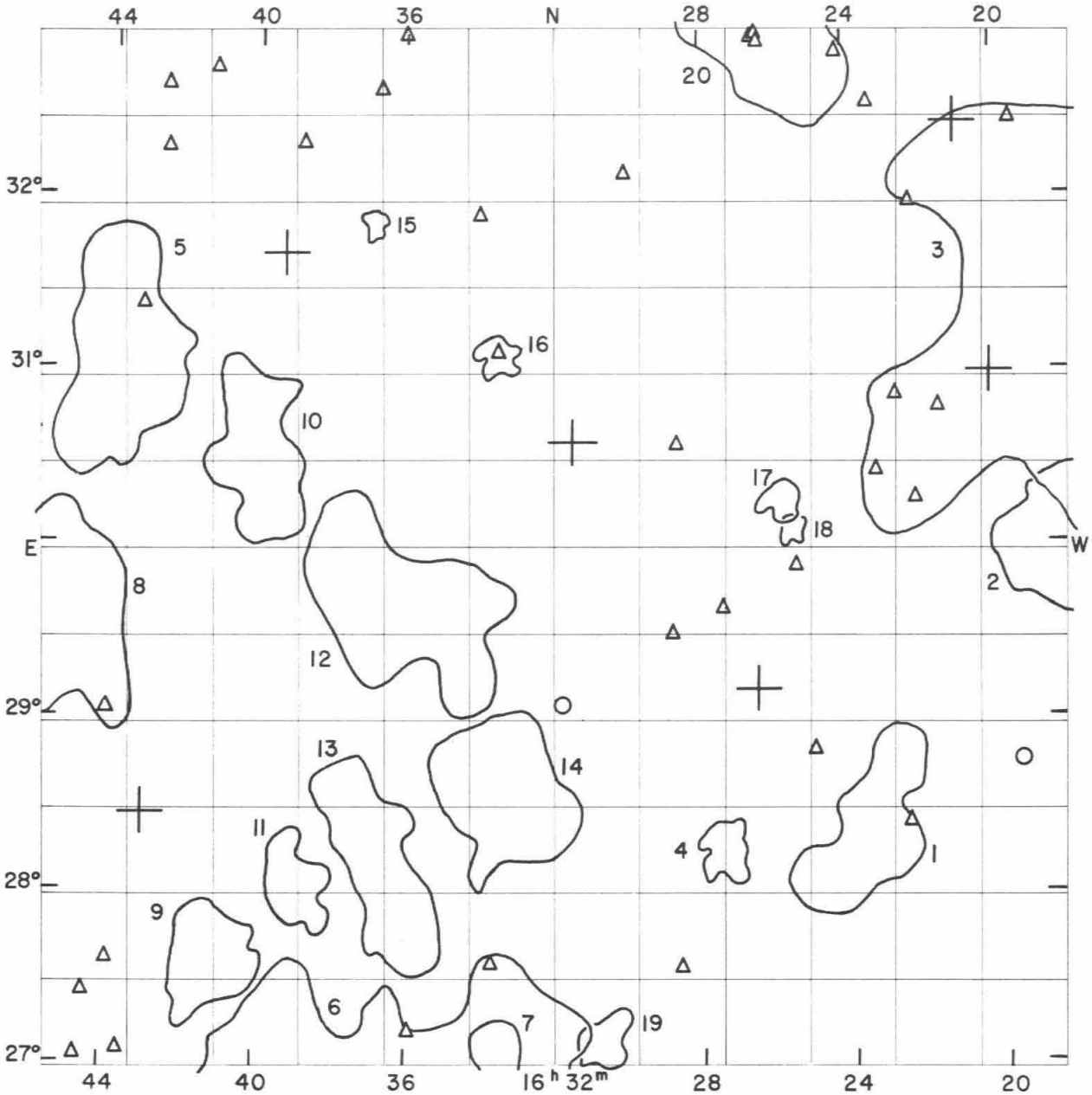
Average number of galaxies per cluster = 196.7

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 52.1 + 30 18		15.3		compact
15 52.7 + 28 00		15.5		
15 53.0 + 31 00		15.7		double system, connected
15 53.9 + 27 07	6016	15.1		
15 54.0 + 30 33		15.3		
15 55.4 + 30 12		14.9		
15 56.5 + 27 07		15.7		double nebula
15 56.5 + 27 45		15.2		very compact
15 56.6 + 26 58		14.9		
15 57.2 + 28 32		15.7		
15 58.4 + 30 31		15.2		double system, connected
15 58.7 + 28 14		15.5		
15 59.0 + 28 51		15.4		compact
15 59.6 + 31 52		15.5		
15 59.8 + 32 02		15.7		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
15 59.9 +32 01		15.4		
16 00.9 +27 09		14.8		
16 00.9 +32 17		15.0		
16 01.8 +26 41		15.5		compact
16 02.6 +30 51		15.7		
16 02.7 +28 14		15.6		compact
16 02.9 +28 18		15.5		
16 03.2 +30 36		15.7		
16 03.2 +31 53		15.6		compact
16 04.6 +28 00		15.4		
16 04.6 +30 14		14.4		
16 04.7 +32 01		15.3		double system
16 05.1 +30 39		15.4		
16 06.3 +28 37	4590*	15.7		triple nebula
16 07.6 +28 11		14.7		
16 07.7 +30 35		15.4		
16 07.8 +30 16		15.6		compact
16 08.6 +31 55		15.3		
16 09.1 +27 00	6076	15.4		double nebula
16 09.1 +27 04	6077	14.9		
16 09.4 +29 29		15.7		
16 09.8 +30 28		15.6		
16 09.9 +29 19		15.6		
16 09.9 +29 58		14.8		double system
16 09.9 +32 15		15.6		double nebula, collision
16 10.1 +28 38		15.5		
16 10.1 +29 43		15.6		
16 10.5 +28 27		15.6		double system
16 10.5 +29 30	6085	14.5		
16 10.5 +29 38	6086	14.8		
16 10.6 +29 47		15.5		compact
16 10.7 +28 25		15.2		triple system
16 10.8 +28 07		15.0		
16 10.8 +32 07		15.6		
16 11.0 +31 01		15.6		triple system
16 11.1 +30 57		15.5		double system, bridge
16 11.2 +31 01		15.7		
16 11.4 +32 25		15.7		
16 12.0 +28 38		15.4		
16 12.1 +29 59		15.3		compact
16 12.4 +30 06		15.5		
16 12.7 +26 42	6096	15.3		
16 13.0 +31 12		15.5		
16 13.3 +26 45		14.9		double system, 15.6 + 15.7
16 13.6 +28 17	6102	15.4		
16 13.6 +31 26		15.7		
16 13.7 +32 05	6103	14.4		
16 13.9 +31 31		15.2		
16 14.3 +27 23		15.1		
16 15.5 +31 19		15.1		
16 15.6 +31 28		15.7		
16 16.3 +31 43		15.7		very diffuse
16 17.7 +31 24		15.3		
16 19.3 +32 28		15.5		
16 19.4 +28 46		14.9		





FIELD No. 168

16^h32^m $+30^\circ00'$

Survey Plate No. 1097

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
22020	16 20 08.8	+ 31 00 25	4.72
22040	16 21 01.2	+ 32 26 54	6.20
22165	16 26 32.4	+ 29 11 05	7.11
22276	16 31 32.1	+ 30 36 10	6.66
22464	16 39 24.0	+ 31 41 42	3.00
22552	16 43 05.6	+ 28 26 53	7.2

CLUSTERS OF GALAXIES

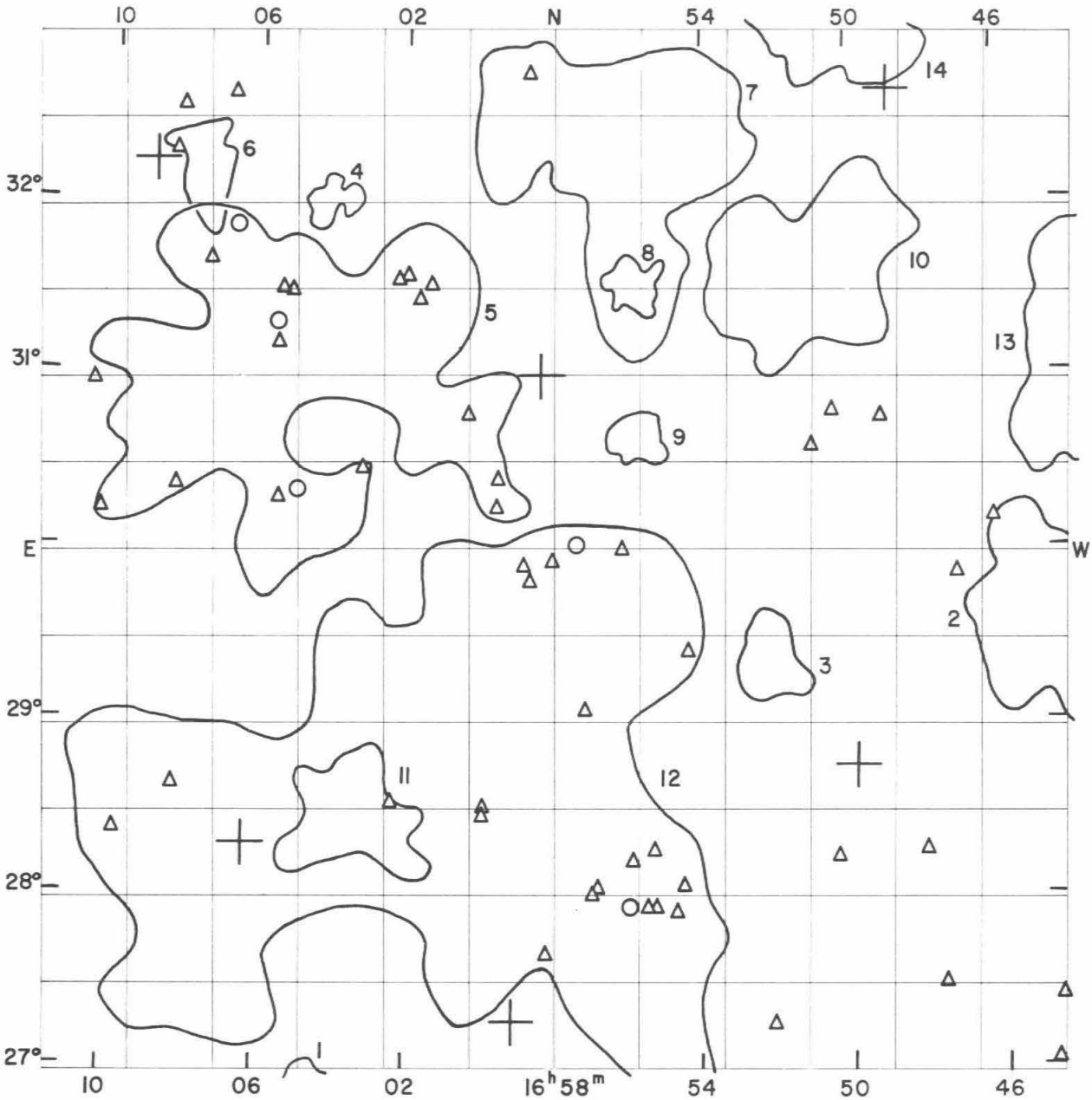
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1608.5 + 3044	medium compact	1775	31.8	Near	3
1618.4 + 3000	compact	193	3.8	D	2
1623.6 + 2820	open	103	3.7	D	1
1625.6 + 3006	compact	68	0.7	ED	18
1625.9 + 3016	compact	87	1.3	VD	17
1626.6 + 3326	open	75	7.8	Near	20
1627.4 + 2815	compact	114	1.7	VD	4
1630.6 + 2710	medium compact	118	1.7	D	19
1633.2 + 2641	medium compact	126	3.6	MD	7
1633.2 + 2835	open	96	4.5	D	14
1633.5 + 3106	medium compact	70	1.3	VD	16
1635.5 + 2608	open	390	15.8	Near	6
1635.9 + 2939	medium compact	122	5.6	Near	12
1636.5 + 2807	medium compact	99	4.2	MD	13
1636.9 + 3151	compact	66	0.8	VD	15
1638.9 + 2802	medium compact	90	2.2	VD	11
1640.0 + 3032	medium compact	85	4.0	MD	10
1641.1 + 2737	medium compact	83	3.2	MD	9
1643.7 + 3106	medium compact	95	5.3	MD	5
1645.1 + 2933	medium compact	130	4.8	MD	8

Average number of galaxies per cluster = 199.3

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
16 19.3 + 32 28		15.5		
16 19.4 + 28 46		14.9		
16 21.6 + 30 48		15.7		
16 22.2 + 30 17		15.4		
16 22.3 + 31 59		15.6		
16 22.5 + 28 25		15.7		
16 22.8 + 30 53		15.6		very compact
16 23.3 + 30 27		15.3		triple system
16 23.4 + 32 35		15.5		
16 24.2 + 32 52		15.4		compact
16 25.0 + 28 50		15.7		
16 25.5 + 29 55		15.4		
16 26.4 + 32 55	6161	15.6		
16 26.5 + 32 58	6162	15.2		
16 26.6 + 32 58	6163	15.4		
16 27.4 + 29 40		15.5		
16 28.6 + 27 35		15.5		
16 28.7 + 30 36		15.7		
16 28.8 + 29 31		15.4		very compact
16 30.1 + 32 10		15.7		
16 31.8 + 29 06		14.2		
16 33.5 + 31 07		15.7		compact
16 33.7 + 27 36		15.3		double nebula, tidal effect
16 34.0 + 31 55		15.6		
16 35.9 + 27 12		15.7		
16 36.0 + 32 58		15.4		compact
16 36.7 + 32 39		15.4		compact

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 38.8 +32 20		15.7		
16 41.2 +32 46		15.6		
16 42.6 +32 18		15.4		
16 42.6 +32 40		15.6		
16 43.2 +31 23		15.5		
16 43.5 +27 04		15.6		
16 43.8 +27 37		15.5		
16 44.0 +29 03		15.7		compact
16 44.5 +27 25		15.5		very compact
16 44.7 +27 02		15.5		



FIELD No. 169

16^h58^m $+30^\circ00'$

Survey Plate No. 129

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ' "	
22685	16 48 50.0	+ 32 38 13	6.26
22715	16 49 51.2	+ 28 44 55	6.52
22935	16 58 22.5	+ 30 59 56	3.92
22957	16 59 09.1	+ 27 16 09	6.37
23135	17 06 22.5	+ 28 17 56	6.99
23189	17 08 55.4	+ 32 14 26	7.46

CLUSTERS OF GALAXIES

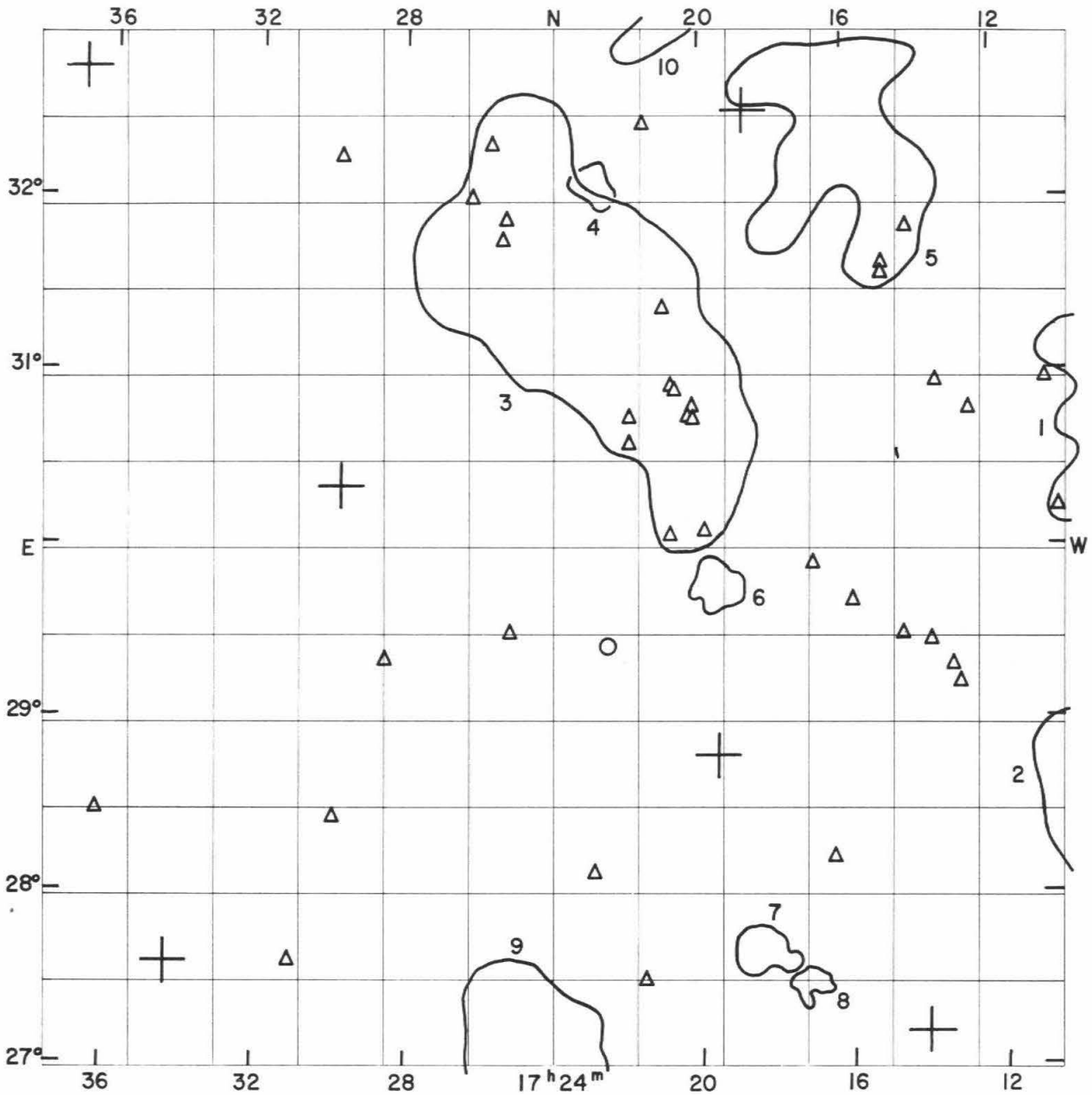
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1643.7 + 3106	medium compact	95	5.3	MD	13
1645.1 + 2933	medium compact	130	4.8	MD	2
1649.9 + 3320	open	146	6.9	Near	14
1651.0 + 3135	medium compact	120	5.9	D	10
1652.2 + 2920	medium compact	87	2.3	VD	3
1655.7 + 3038	medium compact	95	1.8	VD	9
1655.8 + 3130	medium compact	61	1.8	D	8
1656.0 + 3211	medium compact	285	7.9	MD	7
1701.4 + 2830	open	340	16.2	Near	12
1703.3 + 2827	open	94	3.7	MD	11
1704.1 + 3159	medium compact	75	1.5	VD	4
1704.9 + 3056	medium compact	191	10.5	Near	5
1705.2 + 2624	medium compact	96	5.3	MD	1
1707.5 + 3208	medium compact	63	2.3	D	6

Average number of galaxies per cluster = 134.1

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
16 44.5 + 27 25		15.5		very compact
16 44.7 + 27 02		15.5		
16 46.2 + 30 10		15.7		
16 47.1 + 29 51		15.3		
16 47.6 + 27 30		15.6		
16 48.0 + 28 15		15.7		very diffuse
16 49.2 + 30 45		15.6		diffuse
16 50.4 + 28 13		15.7		diffuse
16 50.5 + 30 48		15.5		double nebula
16 51.0 + 30 35		15.2		
16 52.2 + 27 15		15.7		
16 54.4 + 29 25		15.6		diffuse
16 54.5 + 28 04	6261	15.2		
16 54.7 + 27 54	6263	15.1		
16 55.3 + 27 56	6264	15.5		
16 55.3 + 28 16		15.5		
16 55.5 + 27 55	6265	15.4		
16 55.9 + 28 13		15.6		
16 56.0 + 27 56	6269	14.4		
16 56.2 + 29 59		15.1		
16 56.8 + 28 03	6271	15.6		very compact
16 56.9 + 28 00	6272	15.5		
16 57.1 + 29 05		15.3		
16 57.4 + 30 01		14.5		double system
16 58.1 + 29 55		15.7		
16 58.3 + 27 40		15.4		
16 58.6 + 29 48		15.5		
16 58.7 + 32 45		15.5		
16 58.8 + 29 54	6282	15.2		
16 59.6 + 30 15		15.2		
16 59.6 + 30 24		15.3		
16 59.9 + 28 28		15.7		compact
16 59.9 + 28 30		15.4		
17 00.4 + 30 47		15.3		

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
17 01.4 +31 31		15.4		compact with plumes
17 01.7 +31 26		15.4		
17 02.0 +31 34		15.5		
17 02.3 +31 33		15.7		compact
17 02.4 +28 32		15.3		
17 03.2 +30 28		15.5		double system
17 05.0 +30 20		14.7		
17 05.2 +31 29		15.6		double nebula
17 05.4 +31 30		15.5		
17 05.5 +30 17		15.5		
17 05.5 +31 11		15.3		
17 05.5 +31 18		15.0		
17 06.6 +31 52		14.8		
17 06.8 +32 37		15.6		
17 07.4 +31 40		15.4		
17 08.2 +28 39		15.5		
17 08.2 +32 33		15.1		
17 08.3 +30 22		15.1		
17 08.4 +32 17		15.6		compact
17 09.8 +28 23		15.6		
17 10.3 +30 14		15.2		
17 10.6 +30 58		15.6		



FIELD No. 170

17^h24^m $+30^\circ00'$

Survey Plate No. 152

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
23316	17 13 58.8	+ 27 11 22	6.75
23446	17 18 47.2	+ 32 31 51	5.36
23474	17 19 33.6	+ 28 48 21	6.33
23750	17 29 47.5	+ 30 21 18	7.11
23872	17 34 22.5	+ 27 35 51	6.57
23935	17 36 58.7	+ 32 45 59	6.45

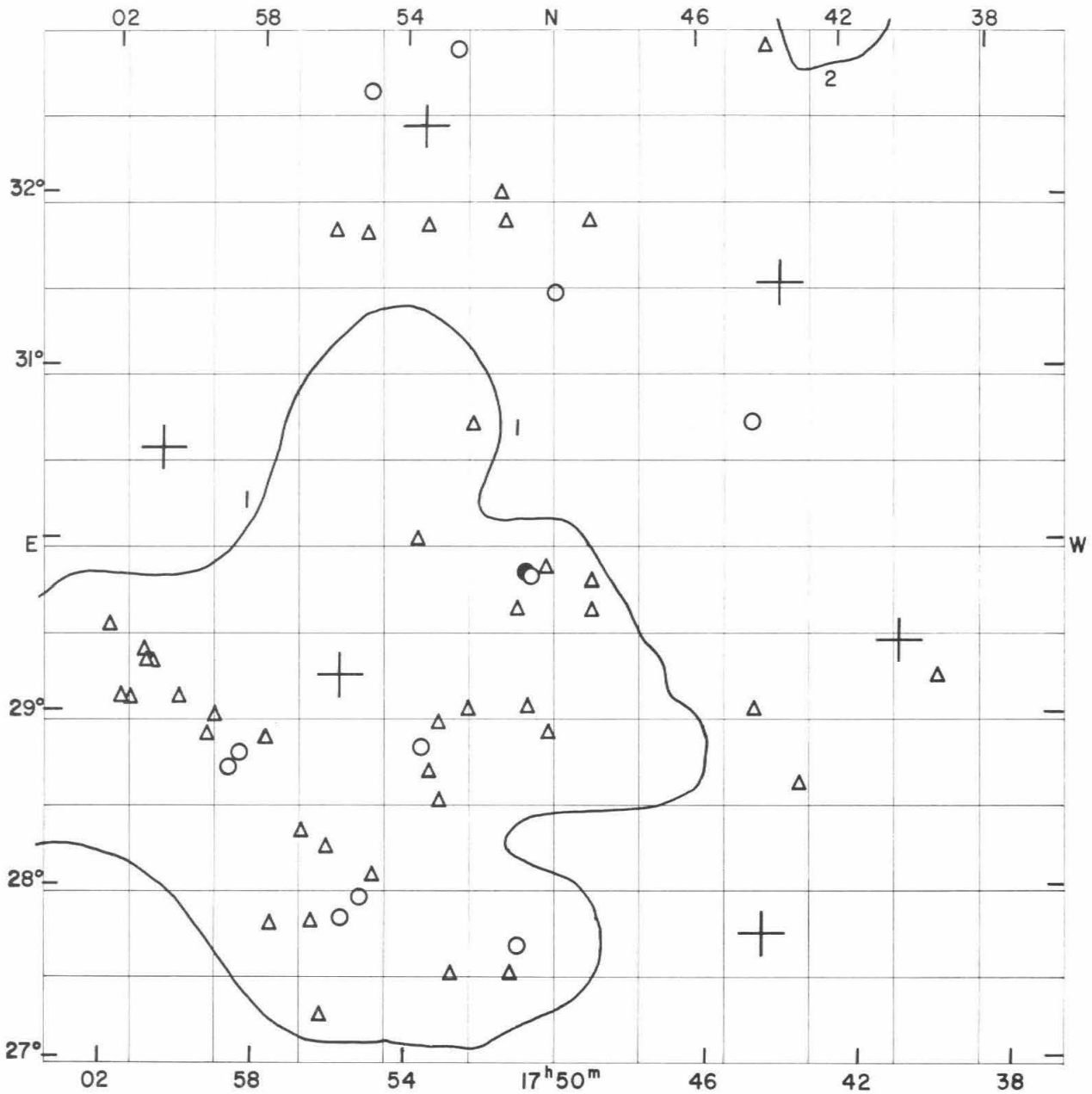
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1701.4 + 2830	open	340	16.2	Near	2
1704.9 + 3056	medium compact	191	10.5	Near	1
1715.9 + 3218	medium compact	101	6.3	Near	5
1717.1 + 2729	medium compact	56	1.1	ED	8
1718.4 + 2740	compact	136	1.6	VD	7
1719.5 + 2946	compact	71	1.5	VD	6
1720.4 + 3320	medium compact	87	3.6	D	10
1722.8 + 3120	medium compact	176	10.0	Near	3
1722.9 + 3206	compact	86	1.3	VD	4
1724.6 + 2703	open	88	4.9	MD	9

Average number of galaxies per cluster = 133.2

GALAXIES

Position α 1950 δ h m o '	NGC IC*	m_p	V_s km/sec	Remarks
17 10.3 + 30 14		15.2		
17 10.6 + 30 58		15.6		
17 12.7 + 30 47		15.5		
17 13.0 + 29 13		15.4		double system
17 13.2 + 29 19		15.7		diffuse spiral
17 13.5 + 30 57		15.2		
17 13.8 + 29 27	6330	15.3		
17 14.3 + 31 51		15.1		
17 14.5 + 29 30		15.6		
17 15.0 + 31 35		15.7		diffuse
17 15.0 + 31 39		15.6		compact
17 15.9 + 29 42		15.7		
17 16.4 + 28 12		15.6		compact
17 16.9 + 29 55		15.7		
17 19.9 + 30 06		15.6		double system
17 20.1 + 30 44		15.4		
17 20.1 + 30 49		15.7		compact
17 20.2 + 30 45		15.6		
17 20.7 + 30 55		15.4		
17 20.7 + 30 56		15.3		
17 20.9 + 30 05		15.7		
17 21.0 + 31 23		15.2		
17 21.5 + 27 30		15.6		
17 21.5 + 32 27		15.2		double nebula
17 21.9 + 30 36		15.7		
17 21.9 + 30 45		15.6		
17 22.5 + 29 26	6364	14.4		
17 22.8 + 28 07		15.7		
17 25.1 + 29 31		15.5		
17 25.2 + 31 54		15.7		compact
17 25.3 + 31 46		15.7		compact
17 25.7 + 32 20		15.3		
17 26.2 + 32 01		15.6		
17 28.6 + 29 21		15.2		
17 29.8 + 32 16		15.6		
17 29.9 + 28 27		15.5		double system
17 31.0 + 27 37		15.7		
17 36.2 + 28 29		15.3		



FIELD No. 171

17^h50^m $+30^\circ00'$

Survey Plate No. 532

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	o ′ ″	
24039	17 40 40.5	+ 29 26 26	6.55
24116	17 43 47.3	+ 31 31 23	6.25
24138	17 44 30.0	+ 27 44 55	3.48
24390	17 53 34.1	+ 32 26 41	7.20
24448	17 55 49.2	+ 29 15 07	3.82
24572	18 00 40.4	+ 30 33 08	6.76

CLUSTERS OF GALAXIES

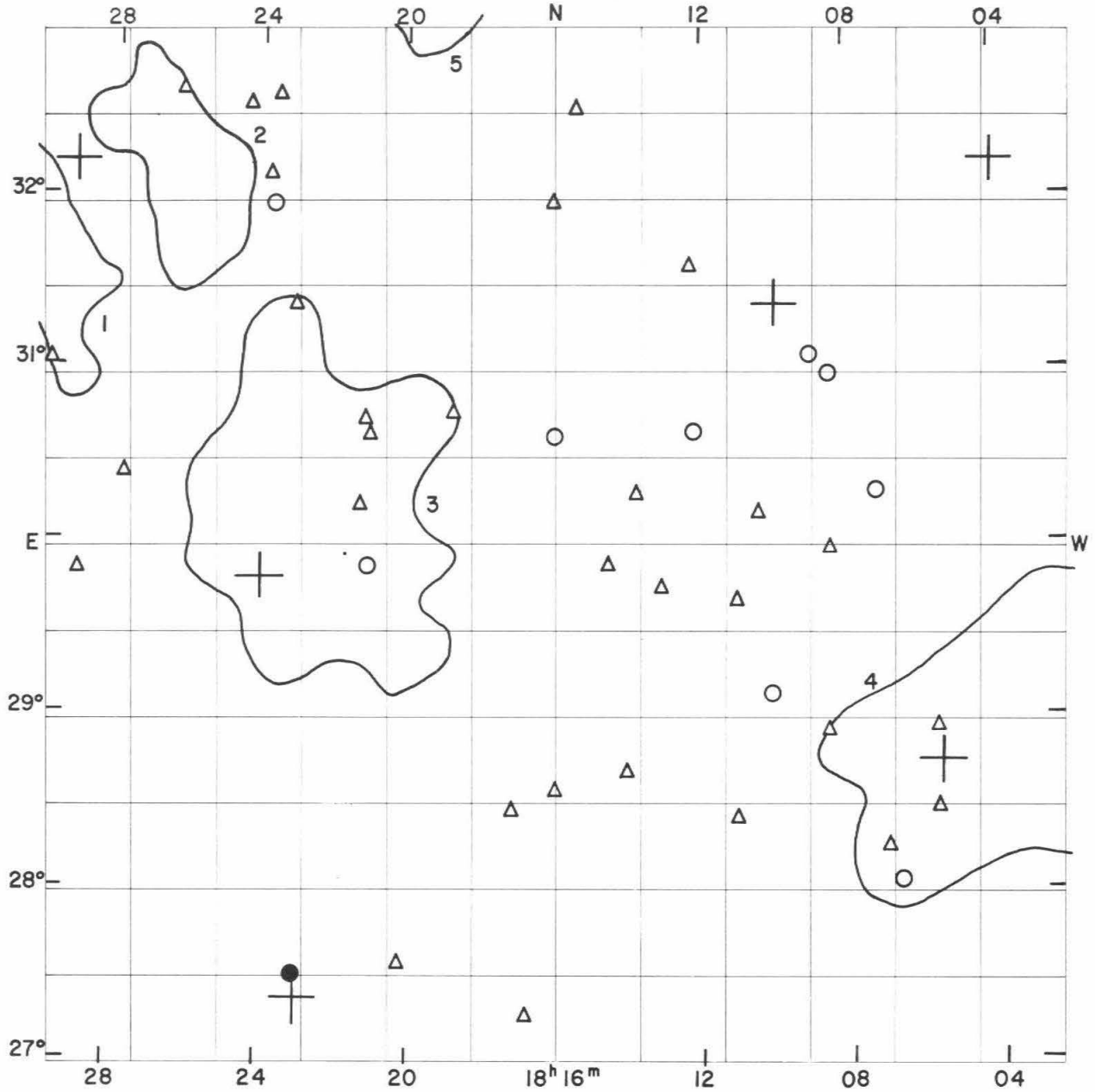
Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1742.1 + 3306	medium compact	86	3.4	MD	2
1756.5 + 2904	open	224	20.3	Near	1

Average number of galaxies per cluster = 155.0

GALAXIES

Position α 1950 h m	Position δ o ′	NGC IC*	m_p	V_s km/sec	Remarks
17 39.7	+ 29 13		15.6		
17 43.4	+ 28 38		15.7		
17 44.0	+ 32 54		15.3		
17 44.6	+ 29 03		15.5		
17 44.6	+ 30 43		14.4		double system
17 48.9	+ 29 38		15.7		
17 48.9	+ 29 43		15.6		
17 49.0	+ 31 53		15.7		double nebula
17 50.0	+ 31 28	6485	14.2		
17 50.1	+ 28 55		15.7		
17 50.2	+ 29 52		15.5		disrupted system
17 50.6	+ 29 50	6486	15.0		compact
17 50.7	+ 29 05		15.7		
17 50.7	+ 29 51	6487	14.0		
17 50.9	+ 27 41		14.6		
17 51.0	+ 29 38		15.5		
17 51.1	+ 27 31		15.7		extremely diffuse
17 51.2	+ 31 53		15.7		
17 51.4	+ 32 03		15.6		
17 52.1	+ 30 42		15.6		disrupted system
17 52.3	+ 29 04		15.2		
17 52.6	+ 32 53		14.3		
17 52.7	+ 27 31		15.6		diffuse
17 53.0	+ 28 31		15.4		
17 53.0	+ 28 58		15.7		
17 53.3	+ 28 41		15.6		
17 53.4	+ 31 51		15.1		
17 53.5	+ 28 50		14.6		
17 53.7	+ 30 01		15.7		
17 54.8	+ 28 05		15.6		
17 55.0	+ 31 48		15.5		compact
17 55.0	+ 32 38		14.4		
17 55.2	+ 27 58		14.9		
17 55.7	+ 27 51		14.5		
17 55.9	+ 31 49		15.6		extremely diffuse
17 56.0	+ 28 15		15.5		very diffuse spiral
17 56.1	+ 27 16		15.4		
17 56.4	+ 27 50		15.7		
17 56.7	+ 28 20		15.7		
17 57.5	+ 27 48		15.6		
17 57.7	+ 28 52	6518	15.1		compact
17 58.4	+ 28 47		15.0		
17 58.7	+ 28 43		14.8		
17 59.0	+ 29 00		15.6		
17 59.2	+ 28 53		15.3		
18 00.0	+ 29 06		15.4		very compact

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o '				
18 00.8 + 29 18		15.6		
18 00.9 + 29 18		15.2		
18 01.0 + 29 22		15.5		
18 01.4 + 29 05		15.3		
18 01.6 + 29 05		15.3		
18 02.0 + 29 30		15.7		



FIELD No. 172

18^h16^m $+30^\circ00'$

Survey Plate No. 282

GC STARS

Nos.	R.A.	Decl.	m_p
	h m s	o ' "	
24671	18 03 57.8	+ 32 13 29	5.92
24711	18 05 35.4	+ 28 45 16	3.83
24831	18 10 01.2	+ 31 23 29	5.02
25147	18 22 59.1	+ 27 21 58	6.20
25165	18 24 02.9	+ 29 47 56	5.71
25299	18 29 15.0	+ 32 12 32	7.30

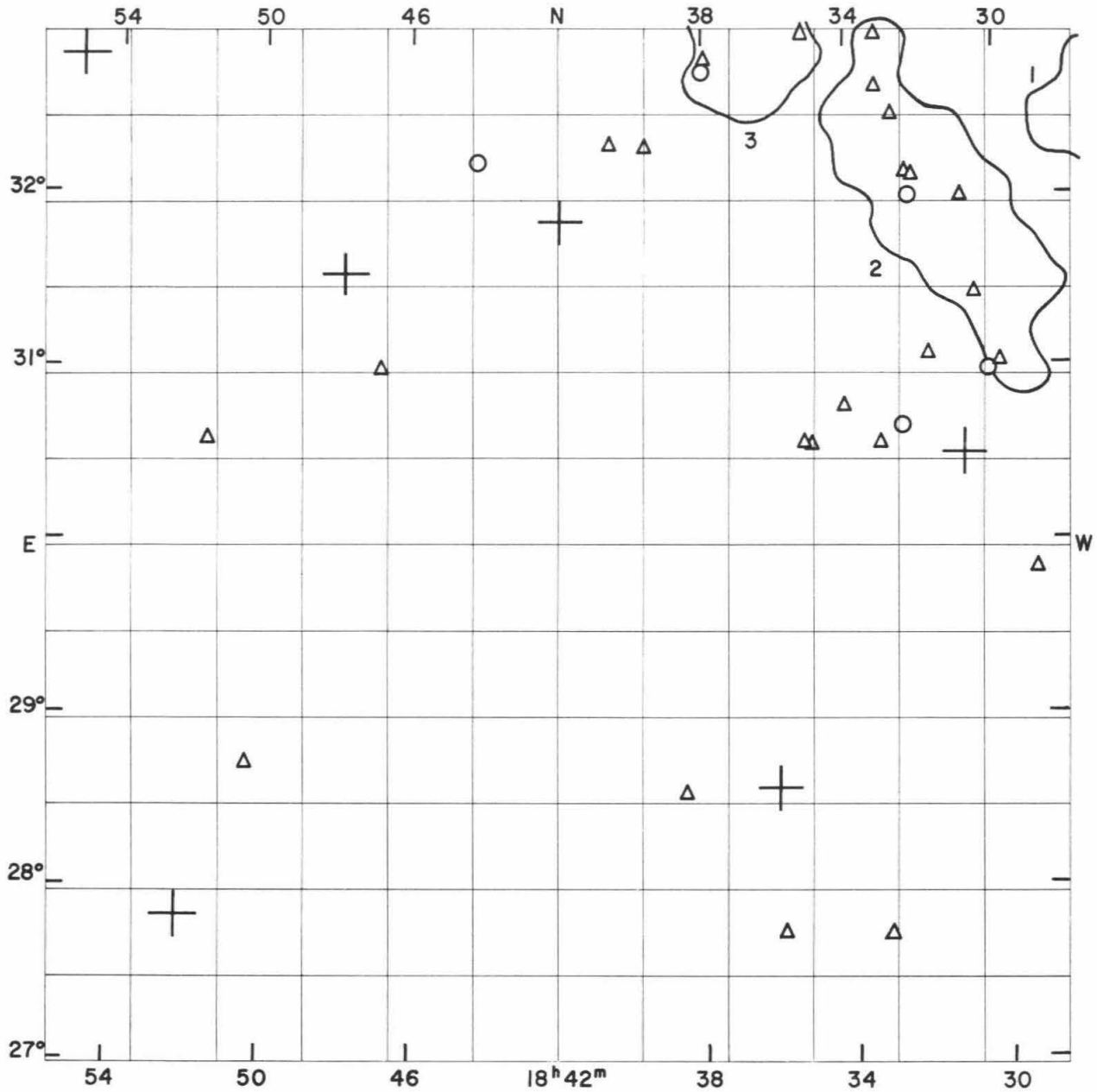
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1756.5 + 2904	open	224	20.3	Near	4
1819.4 + 3325	medium compact	110	5.4	MD	5
1822.2 + 3009	medium compact	148	9.2	Near	3
1826.3 + 3210	medium compact	69	5.1	MD	2
1831.2 + 3154	medium compact	118	6.6	Near	1

Average number of galaxies per cluster = 133.8

GALAXIES

Position α 1950 h m	Position δ 1950 ° ′	NGC IC*	m_p	V_s km/sec	Remarks
18 05.7	+ 28 28		15.4		
18 05.7	+ 28 57		15.6		
18 06.8	+ 28 02		14.8		
18 07.0	+ 28 15		15.7		diffuse
18 07.2	+ 30 18		14.9		
18 08.5	+ 29 59		15.6		
18 08.6	+ 28 55		15.6		
18 08.6	+ 30 59	1277*	15.0		
18 09.0	+ 31 05	6575	14.4		
18 10.2	+ 29 08		14.9		
18 10.5	+ 30 11		15.6		
18 11.1	+ 28 25		15.7		
18 11.1	+ 29 41		15.3		
18 12.2	+ 30 40		14.8		
18 12.2	+ 31 36		15.7		
18 13.1	+ 29 45		15.4		
18 13.8	+ 30 17		15.6		
18 14.0	+ 28 42		15.2		double nebula, jet
18 14.5	+ 29 53		15.5		
18 15.4	+ 32 31		15.5		
18 16.0	+ 28 35		15.6		triple system
18 16.0	+ 30 37		14.6		
18 16.0	+ 31 58		15.4		double system
18 16.8	+ 27 17		15.7		
18 17.2	+ 28 28		15.7		
18 18.8	+ 30 46		15.3		
18 20.2	+ 27 35		15.5		
18 21.0	+ 30 38		15.4		
18 21.1	+ 29 53		14.9		
18 21.1	+ 30 43		15.7		
18 21.3	+ 30 14		15.3		spiral with jet
18 23.0	+ 27 30	6632	13.2		
18 23.0	+ 31 23		15.5		very compact
18 23.6	+ 32 36		15.7		very diffuse
18 23.7	+ 31 58		15.0		
18 23.8	+ 32 08		15.1		
18 24.3	+ 32 33		15.4		
18 26.2	+ 32 38		15.6		
18 27.7	+ 30 25		15.7		
18 29.0	+ 29 51		15.5		diffuse
18 29.8	+ 31 02		15.2		



FIELD No. 173

18^h42^m $+30^\circ00'$

Survey Plate No. 267

GC STARS

Nos.	R. A.	Decl.	m_p
	h m s	° ′ ″	
25340	18 30 55.1	+ 30 30 55	5.37
25490	18 36 02.1	+ 28 35 07	6.59
25643	18 41 58.8	+ 31 52 35	5.52
25836	18 47 50.4	+ 31 34 13	6.50
25942	18 52 13.8	+ 27 50 47	5.82
26030	18 55 09.0	+ 32 50 10	5.21

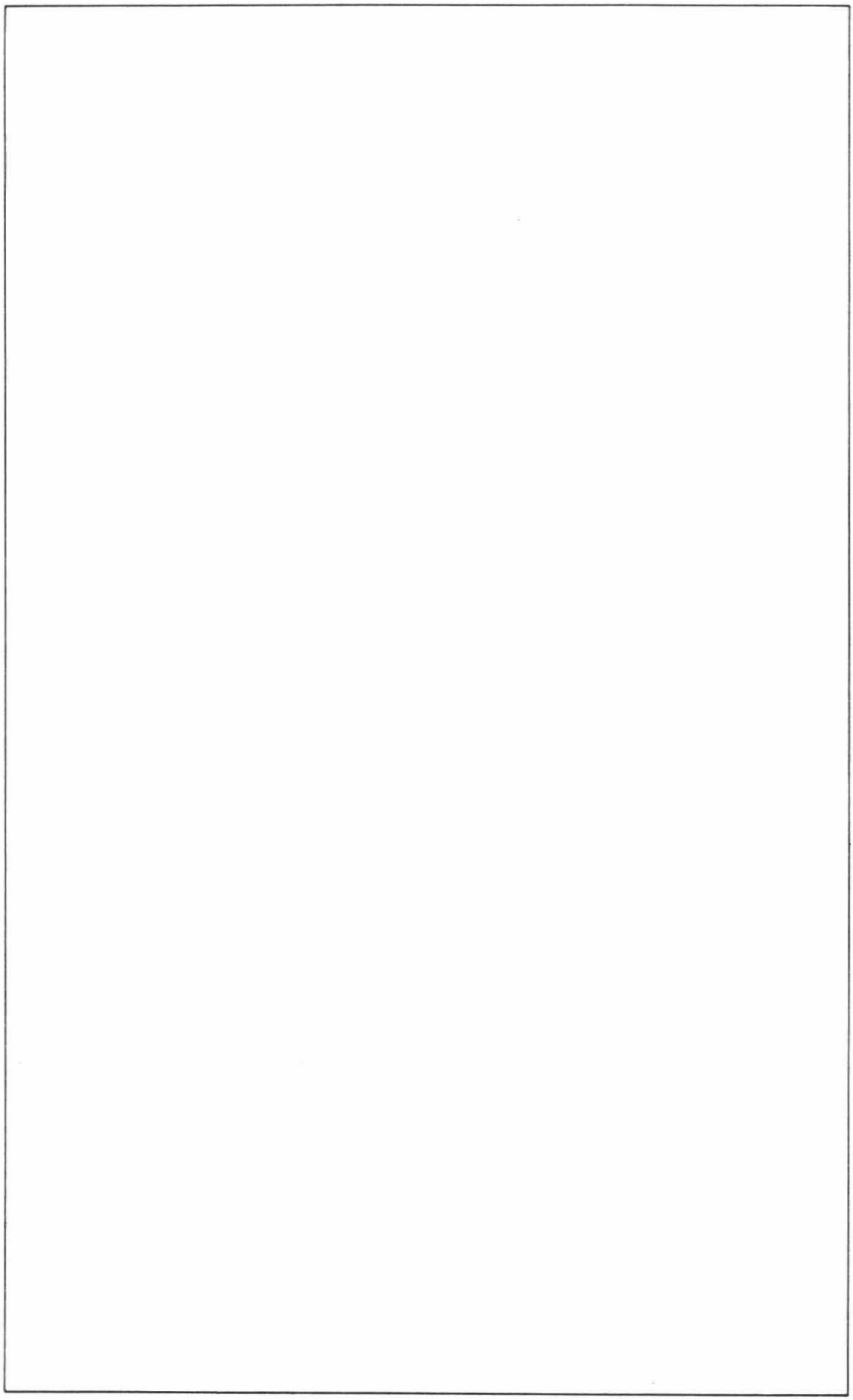
CLUSTERS OF GALAXIES

Cluster	Character	Population	Diameter in cm	Distance	Number on chart
1826.3 + 3210	medium compact	69	5.1	MD	1
1831.2 + 3154	medium compact	118	6.6	Near	2
1836.8 + 3306	medium compact	77	5.2	Near	3

Average number of galaxies per cluster = 88.0

GALAXIES

Position α 1950 δ	NGC IC*	m_p	V_s km/sec	Remarks
h m o ′				
18 29.0 + 29 51		15.5		diffuse
18 29.8 + 31 02		15.2		
18 30.2 + 31 00		14.9		
18 30.6 + 31 27		15.7		
18 30.9 + 32 00		15.6		
18 31.8 + 31 05		15.7		
18 32.3 + 32 01		14.9		
18 32.3 + 32 08		15.6		
18 32.4 + 32 09		15.4		
18 32.6 + 30 41		14.6		
18 32.8 + 32 29		15.5		
18 33.1 + 27 44		15.5		
18 33.1 + 30 35		15.2		
18 33.2 + 32 39		15.5		extremely compact
18 33.2 + 32 57		15.4		
18 34.1 + 30 47		15.4		
18 35.0 + 30 34		15.1		
18 35.2 + 30 35		15.7		
18 35.2 + 32 58		15.6		very compact
18 35.9 + 27 45		15.2		
18 37.9 + 32 49		15.7		diffuse
18 38.0 + 32 45		14.9		
18 38.5 + 28 34		15.5		
18 39.6 + 32 18		15.7		compact
18 40.5 + 32 19		15.4		
18 44.2 + 32 13	6700	14.2		
18 46.8 + 31 00		15.6		
18 50.3 + 28 43		15.6		
18 51.6 + 30 36		15.5		



ERRORS AND OMISSIONS

IN VOLUME I

Page 45: Cluster No. 17 is listed as "open"; it should be "medium compact" instead.

Page 242: For NGC 3351 add this remark: "$m_H = 11.5$ SBb "

Page 263: For NGC 4461 add "$V_s = +1887$ "

Page 266: For NGC 4461 add this new line:

"4461 11.70 S 12.02 S0 12.0 S0 - - "

FIELD No. 70: The following galaxy must be added:

"$\alpha = 12^h28.0^m$, $\delta = +12^\circ46'$, $m_p = 14.5$, $V_s = +1486$, extremely compact "

An open circle should be placed on the map in the corresponding place.